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The China

Medical Missionary Journal



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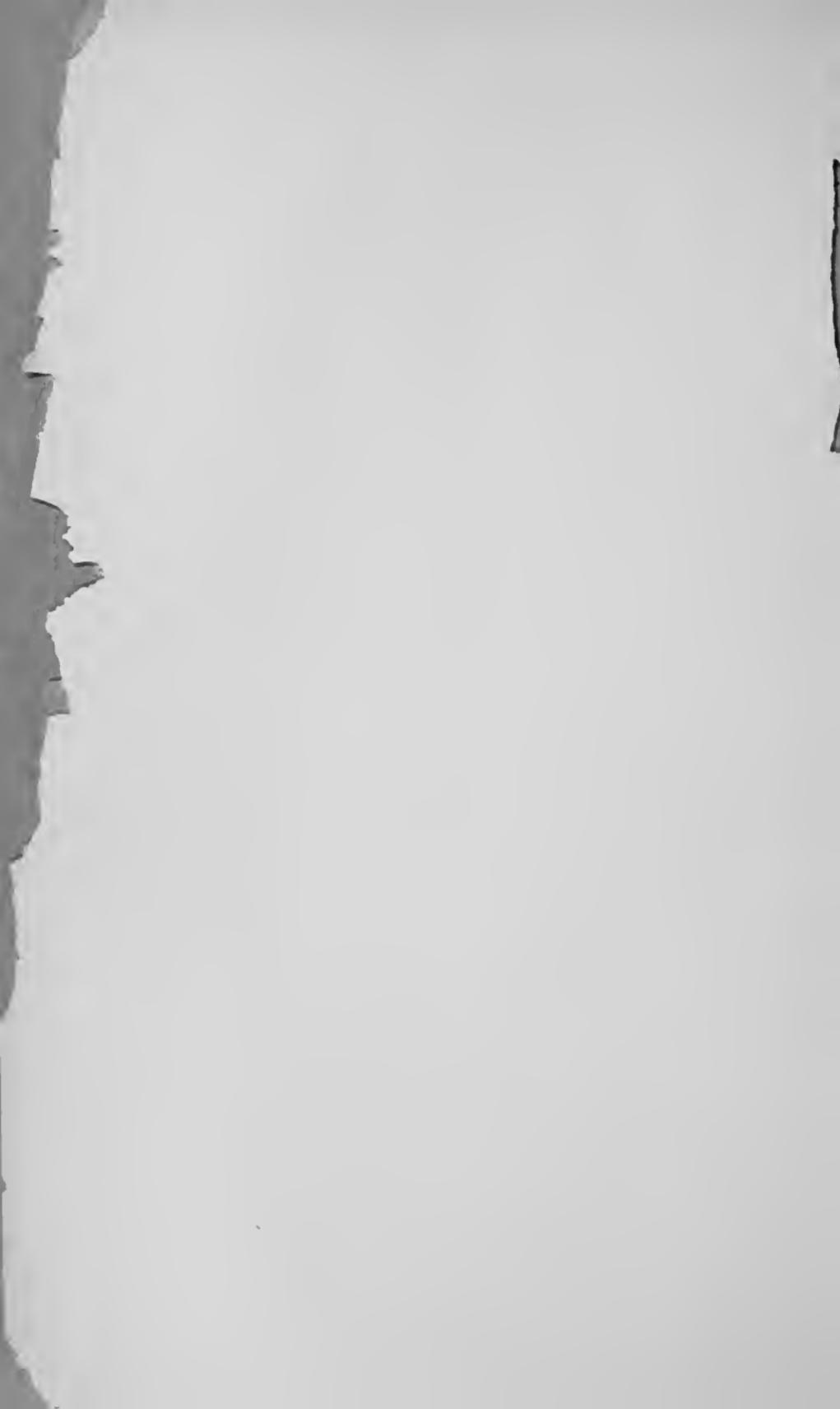
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RUINS OF DWELLING HOUSES,
on Hospital Compound.



RUINS OF WOMEN'S HOSPITAL,
T'ai-yüen fu.



RUINS OF CHAPEL,
Which was also used as waiting room.



FUNERAL SERVICE AT SHOU-YANG HSIEH.
Near the spot where twenty-one Christians were massacred.



VIEWS FROM SHANSI PROVINCE.

(See "The Outbreak in Shansi in 1900," page 98.)



The China Medical Missionary Journal.

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The Subscription Price for *The China Medical Missionary Journal* is Three Dollars a year. There are to be four numbers in each volume.

We will be obliged to our friends for an early transmission of the subscription money, as we have no reserve funds with which to meet our printers' bills. SUBSCRIPTIONS should be forwarded to the Rev. G. F. Fitch, Presbyterian Mission Press, Shanghai.

Articles intended for *The China Medical Missionary Journal*, should be sent to the Editor, who solicits contributions from all Medical Practitioners in China, Corea, Japan, Siam, or elsewhere.

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Original Communications.

[All papers must be in the hands of the Editor two months before date of publication to insure their appearance in the following number. The editor cannot undertake to return manuscripts which are sent to him. A complimentary edition of a dozen reprints of his article will be furnished each contributor. Any number of reprints may be had at reasonable rates if a written order for the same accompany the paper.]

DYSENTERY.*

By FRANCES F. CATTELL, M.D.

INTRODUCTION.

In the beginning of this paper I desire to state that what I have written lays no claim to originality; indeed for the most part it is not expressed in my own language, but compiled from writers on dysentery, chiefly from "Manson's Tropical Diseases," the most recent work on the subject to which I have had access.

Dysentery is a term which, according to Manson, is applied to what is probably a group of diseases, whose principal pathological feature is an inflammation of the mucous membrane of the colon and whose leading symptoms are: pain in the abdomen, tenesmus, and the passage of frequent small stools containing mucous and blood.

ETIOLOGY.

Our present knowledge of the etiology of dysentery is of the most unsatisfactory character. All factors predisposing to inflammation of the colon may be regarded as predisposing factors in dysentery, such as warm climate, bad hygiene, ingestion of irritating food, exposure to cold and wet, cachectic states (especially scurvy), gangrenous stomatitis, and Bright's Disease. It is probable that the well known liability of lunatics to dysentery is associated with that lowering of the resistive powers which is so pronounced a feature in many forms of insanity.

* Read before the Soochow Medical Association, October 19th, 1901.

All ages are subject to dysentery ; occupation has no special influence, and both sexes are liable to be attacked by the disease.

Although in many instances the specific nature of the disease is not to be doubted, the specific body or germ has not been indicated with anything like certainty. The *bacillus coli commune*, a *bacillus dysenteriae*, *staphylococcus aurens*, and *albus*, have all been considered as causing the disease. In one form of dysentery, claims have been advanced for regarding the *amœba coli* as the germ ; but as these same germs are found in the stools of healthy persons, it seems probable that in conditions of sound health the pathogenic organisms of dysentery may exist in, and pass through, the alimentary canal without attacking the tissues and giving rise to the disease. So long as the surface is sound and vigorous, it probably has the power of protecting itself against any such organisms. It is probable that only on the establishment of some condition of lowered vitality the dysentery germ can overpower the natural protective agencies and light up the specific lesions.

The symptoms grouped under the word dysentery are apt to differ in intensity and character in different places and in different epidemics. Some forms of the disease run a more or less definite course and then terminate for good. Other forms exhibit a remarkable disposition to relapse. The dysentery of certain tropical countries, as the East Indies, is prone to be followed by abscess of the liver ; that of temperate climates and certain tropical climates, as the West Indies, is seldom succeeded by hepatic suppuration. These and other circumstances seem to point to a radical difference in the several forms, differences of cause as well as difference of symptoms, course, and sequelæ. There can be no question as to the occurrence of the *amœba coli* in dysentery, but it is difficult to say what may be its exact significance in relation to the disease. That there do occur cases of dysentery, both acute, relapsing, and chronic, when no amœbæ can be found in the stools, is an established fact. It is none the less true that the amœba or an amœba hitherto indistinguishable from *amœba dysenteriae* is found in perfectly healthy stools in cases where there is no reason to suspect the existence of disease of the alimentary canal.

Some writers assert that the *bacterium coli commune* is the cause of dysentery, and is always to be found in the stools of this disease. Generally non-pathogenic, this bacterium, they claim, acquires in certain circumstances very virulent properties. They say that in the bowel it is often associated with a bacillus like that of typhoid as well as with *stuptococci* and that the *bacterium coli dysenteriae* is but a variety of the *bacterium coli commune*, a variety brought about in some way by the presence of the bacteria mentioned ; that in consequence of the presence of these other bacteria the *bacterium coli commune* acquires the power of secreting a specific toxin. They claim that

this toxin can be precipitated by aleohol, and has the property of giving rise to dysentery when administered by the mouth, the anus, or hypodermically. These results, however, lack confirmation.

Whatever the specific germs of colitis may be, it is probable that they have their action supplemented by the ordinary bacteria of suppuration and ulceration which find their opportunity in a tissue weakened by what may be considered the more specific cause or causes of dysentery.

Notwithstanding the large amount of uncertainty as to the specific cause of dysentery, it has been fairly well ascertained that these germs, whatever they may be, are often introduced by means of drinking water. The improvement in the public health in large towns in India when improved water supply has been provided, and the improvement in the health of the British navy following the introduction of the regulation that in all places when the water supply was not above suspicion the drinking water served out to the men should be distilled, constitute powerful testimony in favor of regarding dysentery as a water-borne disease. This conclusion received additional support from the occurrence of epidemics of dysentery in the crews of ships which have watered at polluted sources, as well as by the occurrences of similar epidemics in large institutions in which by some accident surface water has leaked into the water supply. This of course does not exclude the possibility of other sources of infection, as by closets, vessels, or instruments used by dysenteries; but the water theory probably covers the vast majority of dysentery epidemics as well as of sporadic cases.

VARIETIES.

As has already been said it is well to regard the term dysentery as but the name of a group of symptoms indicating an inflammation of the colon, much in the same way as we regard diarrhoea, cough, or fever as symptomatic merely of disease and not as indicating a single, well defined disease. Dysentery simply means inflammation of the colon, and there are many kinds. The different forms described by writers on the subject are: catarrhal, ulcerating, gangrenous, and chronic.

PATHOLOGY.

Catarrhal Dysentery.—Cases of catarrhal dysentery rarely die; the exact condition of the mucous membrane therefore in these cases can only be conjectured. It is reasonable to suppose that in such cases the pathological condition consists mainly in congestion or in catarrhal inflammation; that here and there, or throughout its extent, the mucosa and perhaps submucosa are slightly swollen, red, and injected, and the surface of the former is softened, perhaps eroded and covered with a blood streaked glairy mucus of the same character as that which appears in the stools.

In ulcerative dysentery, often called amœbic, the mucous membrane of the large intestine and very frequently a foot or two of the lower end of the ileum, are found to be thickened, congested, inflamed, speckled perhaps with ecchymoses, œdematosus and more or less riddled with ulcers of various sizes, shapes, and depths. It is found as a rule that the brunt of the disease has fallen on the sigmoid flexure and descending colon.

The dysenteric ulcer varies in size from a punched out looking sore the size of a pea, or even less, to a patch several inches in diameter; the edges of the sores are ragged and undermined, the floor is sloughy and grey, suggesting that the ulcer extends by a process of burrowing in the submucosa—the superjacent mucous membrane sloughing or disintegrating in consequence of the destruction of the nutrient vessels.

This burrowing may extend for a considerable distance beyond the apparent margin of ulceration, so that long suppurating fistulous tunnels may connect one ulcer with another. The floor of the active dysenteric ulcer is generally formed of a sloughy material lying on the muscular coat, but the sore may penetrate deeper than this and include the muscular coat itself and even the serous membrane.

The *amœba coli* is found not only in the mucus lying on or thrown off by the inflamed bowel but also in the sloughs on the ulcerated surface, and according to some observers in the tissues constituting the base and sides of the ulcer and the still living and relatively healthy tissues for some distance around the sore.

Along with the ulceration there is intense congestion of the non-ulcerated parts of the mucous membrane, and in some instances a large portion of the mucous membrane may be seen to have died en masse and become gangrenous. In such cases extensive sloughs may be thrown off as a sort of tube which are apt to be mistaken—during the patient's life time—for a diphtheritic cast of the bowel.

In chronic dysentery the ulcers are usually smaller and less numerous than in the acute disease and less ragged in outline, tending to become circular in shape and to acquire thickened rather than undermined edges. Cicatricial bands and contractions may narrow the lumen of the gut, whose functions are still further hampered by thickening or by adhesions which unite and bind it to neighboring organs. In chronic dysentery large patches of the bowel may be pale and anaemic, whilst at the same time other patches of the gut are congested. Some parts may be thickened and contracted, others again may be thinned and dilated—the glandular structures being atrophied.

SYMPTOMS.

Dysentery commences in various ways, insidiously or suddenly, or it may be grafted as it were on some general affection such as scurvy or malaria, or

some chronic disease of the alimentary canal, as sprue. It may assume acute characters, or from the outset the symptoms may be subdued and of little urgency. As a rule the symptoms are proportioned to the extent of the disease, but not necessarily so. There is endless variety in the character, urgency, and significance of the symptoms of dysentery. As a rule, the nearer to the rectum the lesions, the more urgent the tenesmus; the nearer the cæcum, the more urgent the griping.

In catarrhal dysentery a common history to receive is that the patient has suffered for some days with what was supposed to be an attack of ordinary diarrhoea. The stools, at first copious, bilious, and watery—perhaps four or five in twenty-four hours—by degrees become less copious and more frequent, more mucoid in character and their passage attended by a certain and increasing amount of straining and griping.

Only about a tablespoonful is passed at a time, and this consists of little but mucus, tinged or streaked with blood. The suffering is sometimes very great, but there is very little fever, rarely more than one or two degrees.

In other cases the onset is much more abrupt. Within a few hours of its commencement the disease may be in full swing, the stools at first feculent, soon come to consist of little save a yellowish, greenish, or dirty brown blood-tinged mucus. In either case, after perhaps four or five days, the urgency of the symptoms may gradually diminish and the acute stage taper off into a subacute or chronic condition, or it may terminate more quickly in perfect recovery. On the contrary, should the disease advance, the urgency of the symptoms shows hardly any abatement; the stools become very offensive, and now contain, besides blood, large or small shreddy ash-colored sloughs; this may go on for days or weeks, as the presence of the sloughs in the stools indicates the existence of deep ulceration which must necessarily take some time to cicatrize. What is known as gangrenous dysentery is symptomatically but an aggravated form of acute ulcerative dysentery. Instead of being mucoid the stools come to consist of a sort of dirty water, like the washings of flesh. On standing they deposit a coffee-ground looking material; now and again sloughs of every shape, size, and color, from ash grey to black, are expelled. Sometimes tubelike pieces, evidently rings of mucous membrane, which have been cast off en masse, are discharged. In such cases the patient rapidly passes into a state of collapse. He sweats profusely, the whole body is cold, he may vomit, and the abdomen become distressingly tympanitic. Low muttering delirium sets in, the pulse becomes small and running, and the patient rapidly sinks. Recovery is extremely improbable.

Whenever in dysentery sloughs separate, hemorrhage is always possible. Sudden collapse may occur—from this cause—even in otherwise mild cases. As in typhoid, the occurrence of hemorrhage is more or less of the nature of an accident, depending as it does on the position of the sloughing sore in

relation to the artery. Another grave, though fortunately rare accident is perforation. Should the patient survive the shock of an extensive extravasation into the peritoneum, symptoms of peritonitis will supervene and rapidly prove fatal.

In acute dysentery the liver is usually enlarged and may be tender. It sometimes happens that attacks of hepatitis serve to alternate with attacks of dysentery. These cases often result in the formation of an abscess or multiple abscesses of the liver. In the latter event they almost necessarily prove fatal.

MORTALITY ; SEQUELÆ.

Although now and again cases are met with which prove directly fatal from rapid exhaustion from hemorrhage or from perforation, the direct and immediate mortality from this disease under modern methods of treatment is not very high. As a rule it is the sequelæ of the disease that we have to fear rather than the disease itself. The chronic ulceration, scarring, thickening and contraction of the gut, are conditions which cannot be remedied and which too often, after months or years of suffering, lead to intestinal obstruction or very frequently to a general atrophy of the glandular system of the entire alimentary tract, wasting and fatal asthenia. Such patients hardly ever pass a healthy motion, are troubled with chronic indigestion; they pass their food unaltered; they have recurring attacks of diarrhoea; they are flatulent, have red tongues, often ulcerated and tender; they develop sprue, and sooner or later almost invariably succumb. The gravest of all sequelæ of dysentery is abscess of the liver. This sometimes accompanies or quickly follows dysentery, but more often it shows itself after months of comparative good health and when dysenteric symptoms have long since ceased to trouble the patient and had almost been forgotten. The intimate connection of abscess of the liver with dysentery and the presence of the *ameba* in the pus of a large proportion of liver abscesses, are now well ascertained facts which constitute a powerful but by no means conclusive argument for regarding the amœba as an etiological element if not the probable cause in at least one form of dysentery. There is yet another circumstance in connection with liver abscess which is not without a significance pointing in the same direction. In a large proportion of liver abscesses the usual pyogenic bacteria are absent.

An occasional sequence of dysentery is the growth of polypoid bodies on the mucous membrane of the rectum and descending colon. Manson reports a case in which there were enormous quantities of these growths of considerable magnitude, some of them at their free end being as large as the tip of the little finger and with pedicles from one to two inches in length. During life these polypoid bodies appeared in the stools, often in great numbers, looking like as many mucilagenous seeds.

DIAGNOSIS.

Provided reasonable care be exercised, diagnosis, especially in acute cases, is usually easy. In chronic cases the question of hemorrhoids, polypus, stricture, tubercle, malignant or specific disease, proctitis, abscess about the rectum and tumor in the bowel may require to be considered. In children especially intussusception may occur independently or as a complication of dysentery. The possibility of this should not be overlooked.

TREATMENT.

In the treatment of dysentery, rest is of the greatest importance. When the diagnosis is established the patient should at once be sent to bed and the use of the bed pan enforced. The bowel should, as far as possible, be kept at rest by stopping all solid food and the diet reduced to a minimum, selecting only such foods as while possessing considerable nutritive value, yield but small fecal residue. The tongue is a fair index to the kind of food most likely to suit the case. When this organ is coated, indicating gastric catarrh, small quantities of thin chicken soup, egg albumen, thin barley or rice water are better borne than milk. When the tongue has become clean, then milk, pure, diluted with barley or rice water or peptonized, is the best diet. These foods should be taken in small quantities at a time, a little every hour or two and must be given neither hot nor cold, as food when either too hot or too cold, is more apt to excite peristalsis and to cause colic and straining. If upon inquiry it is found that there is reason to suspect either a malarial or a scorbutic element in the case, treatment must be modified accordingly.

If malaria is suspected, the blood should be examined for the plasmodium, and if found quinine must be freely administered, either by mouth, or if the bowels are very irritable by hypodermic injection. The presence of scorbatus of course indicates fruit juices and fresh unboiled milk, in addition to the usual treatment for dysentery.

The drugs which have proved of the most service in the treatment of dysentery are *ipecacuanha*, sulphate of magnesium or sodium, opium and calomel.

It is difficult to decide in any given case which of these drugs is likely to prove the more effective, but in any case, one or the other ought to be used at once; one failing after a fair trial the other, unless manifestly contraindicated, should get a chance. *Ipecacuanha* must be given on an empty stomach. The best plan is to interdict all food for three hours, then give fifteen or twenty drops of *laudanum* in a tablespoonful of water and at the same time apply a mustard poultice to the epigastrium. About twenty minutes later from twenty to thirty grains of *ipecacuanha* is administered;

some giving as much as sixty grains. To prevent vomiting, the patient should lie flat on his back; better without a pillow, and for at least three or four hours should not eat, drink, speak or move. Saliva should not be swallowed, as this is sure to provoke vomiting.

After three or four hours, after all feeling of nausea has subsided, small quantities of food may be given at intervals until the next day, when the dose should be repeated. As a rule one or two such doses cause the acute symptoms to rapidly subside. It may be necessary to go on with *ipecacuanha* once or twice a day for two or three days. Should, however, this drug appear to be doing no good, *sodium sulphate*, which is less irritating than *magnesium sulphate*, may be tried. These salts have the advantage over *ipecac* of not causing nausea and are quite successful. They may be given in drachm doses, in a little hot water every quarter of an hour, until a purgative effect is produced, or they may be given in a large dose, half an ounce to be given with, followed by smaller dose if necessary.

The lessening of tenesmus and the production of copious watery feculent stools is the test of the successful action of the sulphates. *Castor oil* may be administered in a large dose at the beginning of the attack or in small doses every three hours.

The diarrhoea which remains after the subsidence of the acute symptoms generally yields quickly to *salicylate of bismuth*, gr. x, xv, and *morphine*, gr. $\frac{1}{2}$. Other drugs mentioned for the treatment of dysentery are *simarubamonsonia orata* and *cinnamon*.

During the attack the patient may suffer much from griping and tenesmus. These are generally relieved by hot fomentations and turpentine stupes. Tenesmus and dysuria are best relieved by *morphine*, hypodermically, or by an enema of a wineglassful of thin starch water, containing from forty to fifty drops of *laudanum*. Two drachms of *bismuth* may be added to this sedative enema with advantage. High rectals of warm water and *boric acid*, or *quinine*, are frequently of great service. The *New York Medical News* for August 3rd, suggests colostomy for the cure of amoebic dysentery and also speaks of the value of high injections, emphasizing the importance of slowly filling the colon first, allowing the rectal pouch to fill last, so that the desire for evacuation will be prevented.

The *British Medical Journal* for April 13th and the *New York Medical Record* of September 21st, both advocate the use of *sodium sulphate* in dysentery; the former based on observations on 855 cases in India with only nine deaths; the native mortality of from thirty to thirty-seven per cent. having been reduced by this treatment to one per cent.

In the treatment of chronic dysentery injections of large quantities of *silver nitrate* solution of a strength of from half to one grain to the ounce of distilled water have proven the most effective. The bowel should first be

cleared by a minute dose of *castor oil*, followed by a large enema of three or four pints of warm water, to which two or three teaspoonfuls of *carbonate of soda* have been added. The whole of this injection having escaped, and the bowel being quite empty, two or three pints of the *nitrate of silver* solution should be thrown in by means of a long tube passed slowly and carefully into the bowel, as far as it will go without kinking.

American Presbyterian Mission, Soochow.

CASES IN C. I. M. HOSPITAL, CHEFOO.

By GEO. KING, M.B., C.M.

A few notes of some cases we have had under treatment may be of interest.

1. *Lithotomy, combined perineal and suprapubic.*

The patient, a lad of about seventeen, had suffered from urinary calculus for some twelve years. I first operated by the perineal route, but could not dislodge the stone, so went on at once with the suprapubic, and even then I had to twist out the stone with some force ; it being apparently held firmly in the bladder wall. It proved to be of a peculiar hour-glass shape ; two bulbous ends connected by a smaller portion. The patient had for a long time suffered from attacks of pain in the right kidney, followed by discharge of pus in the urine, and though he was long and assiduously cared for, and the wounds practically healed, he eventually sank.

2. *Lithotomy, suprapubic.*

Patient was a strong, healthy young man. I distended the rectum with wool plugs and bandage, and the bladder with *boric* solution. The stone was easily removed (weighed over two ounces), the bladder and abdominal walls separately sutured, and primary union resulted.

3. *Lithotomy, suprapubic.*

Old man, about sixty years ; here the distension of bladder and rectum did not succeed in lifting the bladder to the abdominal wall, and I had difficulty in fixing the bladder and getting hold of the stone. A Chinese medical friend came to my aid with his smaller hand and removed it. It proved to be a strawberry-like stone, about the size of a walnut. I had to leave the bladder unsutured. As the leakage of urine seemed persistent, I passed in a heated wire, and after this the wound closed up, urine was passed by the urethra, and the patient convalesced rapidly. I was anxious, lest the peritoneum might have received some irritation or injury, and put the patient on *epson salts* after the operation, which was, I think, beneficial.

4. *Cyst of Maxillary Antrum.*

A healthy lad of seventeen applied for treatment for a very large swelling of the right side of his face; the right nostril was blocked and the right palate bone greatly depressed. There were three stunted teeth about an inch inwards from the cheek. Toothache had preceded the swelling which had lasted some four years, gradually increasing. I removed the stunted upper teeth on the right side (perhaps a bicuspid and two molars). The fang of the innermost tooth was rounded, thickened and eroded, and possibly projected into the antrum. I bored up through its socket into the antrum; offensive bloody fluid escaped; I detected no solid growth in the cavity and stuffed in *iodoform* gauze. Each day on removing the plug, a quantity of creamy white pus escaped, and I decided to make a larger opening to explore more thoroughly. Incising the gum well above the alveolar margin, and clearing the bone, I trephined, but found only a large cavity, lined apparently with velvety, thickened endosteum or mucosa; I swabbed with *zinc chloride* and packed with *iodoform* gauze.

5. *Fibroma.*

A middle-aged woman came with a large firm swelling between her right thumb and forefinger, and on cutting down I found a firm whitish tumour, the size of a hen's egg, which shelled out easily from connective tissue. She had had it for some eight years.

6. *Amputation through Thigh.*

A young man was admitted with a very large and putrid ulcer of the shin, probably specific. After removal of the débris, an area of about the size of a half crown on the tibia was left bare. The ulcer healed steadily from the margins, but the denuded bone was left uncovered. After it had been dressed carefully for some time, phagedænic inflammation supervened very unexpectedly, with severe constitutional symptoms and a temperature of over 104°. Amputation seemed indicated, and was performed through about the middle third of the thigh; the soft parts below the knee not being sufficient or sufficiently healthy to provide good coverings. Superficial primary union was not obtained, and the flaps needed support for some time; but sound healing eventually took place, and the man is now waiting for an artificial leg to leave the hospital. This is being made locally for nine dollars, and is to have a properly shaped foot, with movement at the knee, permitting flexion when sitting.

7. *Thigh Amputation.*

An emaciated, wretched looking man, suffering intensely and long bed-ridden, was brought in from the country with an absolutely disorganized knee in a most putrid condition; the pus discharging from several sinuses and

the stench offensive beyond description. I assisted Dr. Guinness in amputating through the thigh pretty high up; the purulent infiltration extending above the knee itself. The after history of the case was very encouraging. The patient gained rapidly in weight and spirits, the stump healed soundly, and he returned home a different man.

8. Cyst of Frontal Sinus.

A man about twenty years of age was admitted for a large firm swelling, greatly displacing the left eye downwards. I made a horizontal incision below the level of the eyebrow and found a cyst which I accidentally pricked, and then freely opened, when a quantity of thick, white, glairy, brain-like material poured out. After the cyst was emptied, this material continued to well up, apparently inexhaustibly, from an orifice in the bone. To deal with the case effectually it would have been probably necessary to trephine the bone and enucleate the eye, but the patient preferred allowing the wound to heal, which it did readily.

9. Stab Wound, with Prolapse of Liver.

The patient had attempted suicide in a fit of rage and inflicted a wound in the middle line, perhaps two or three inches long, commencing about an inch below the ensiform cartilage. Through the wound protruded a portion of liver, gripped tightly into a pedicle at its point of exit, but flattened out into a disc beyond. This had been dressed with, I think, the skin of a chicken and certainly with feathers, and the odour was exceedingly offensive. The wound had, I think, been inflicted some four days previously. I considered the question of enlarging the wound, cleansing and returning the hernia for fear of hemorrhage, but a friend favoured ligaturing and excising the protruded portion, and I did so. The wound healed readily, with the stump adherent in it.

10. Fracture of Lower Jaw.

A lad was plying his boat in the bay, and when behind the paddle of a steamer the boat was overturned; he fell overboard, and as he rose, struck the paddle with his face and jaw. The bleeding from the mouth was persistent and the face became much suffused with blood. I tried to wire the fragments, but without much success, and put in cork plugs between the teeth and over the chin a plaster bandage. The boy could not suck his porridge through a tube, and immobility did not seem attainable. There was some suppuration which reached the skin, and the pus was evacuated and antiseptic solution syringed through into the mouth. A good result was eventually obtained.

11. Necrosis of Fibula.

A middle aged labourer came with a discharge from a sinus in his leg. The bone had been diseased for some twenty years, a sequestrum had been

discharged from a sinus about that time previously. The fibula was enormously thickened below, and had, as was ascertained later, become united with tibia. I cut down along a sinus and removed a long, thin sequestrum ; but this was lying in a huge cavity filled with débris, and it was found later that the whole shaft of the fibula had gone in its middle portion. Pyemia unfortunately set in, and though amputation was performed below and above the knee the patient sank. The femur was found full of pus.

12. *Gumma of Forehead.*

An elderly man came with an ulcerating mass on the forehead, having a cartilaginous base. The Pacquelin cautery was applied and followed by curette. The cartilaginous material was removed, and the whole is now healing well. A small area of the frontal bone was denuded, but this is now almost covered.

13. *Enchondroma of Parotid Region.*

Young man ; a great mass was removed, but it recurred in about two months, and on attempting to remove it a second time the muscles and tissues were found to be so infiltrated that it was deemed more prudent to desist.

14. *Abscess of Thigh.*

The last case of this type we have had was that of a boy brought in by his father. I made an opening and evacuated a large quantity of pus, but the discharge persisted and the patient grew worse. I made a counter opening and syringed through, but the abscess had burrowed deep and far among the muscles and the upper part of the femur was very greatly enlarged. The father insisted on taking the boy out of hospital, ostensibly to take him home, but we heard that he really abandoned him to die by the roadside.

China Inland Mission, Chefoo.

THREE CASES OF SUPPURATING KNEE JOINT.

By EDWARD L. BLISS, M.D.

CASE I. Cause unknown ; knee was very painful for weeks, confining patient to bed. Finally discharged back of knee. When he came to us the knee was bent and apparently fixed at a right angle, with several sinuses in and below popliteal space. The patient was much emaciated. The treatment was irrigation and opening of sinuses. *Cod liver oil* and *iron* were administered. After six weeks the sinuses healed, the knee gradually assuming correct position and becoming perfectly moveable.

CASE II. A Hunanese soldier. After gonorrhœa, knee became painful, but apparently recovered. Some time later, after marching and carrying a load

the knee again became painful and swollen. A native doctor punctured the joint with a needle or trocar, resulting in suppuration which finally discharged at the lower inner edge of patella. About ten days later he was brought to the hospital. At that time the discharge of pus was by measurement a pint a day. The joint was laid freely open and drained perfectly and antiseptic irrigation practised, first with *carbolic*, then with *corrosive sublimated* solution. The patient showed symptoms of mercury poisoning, but no impression was made on the discharge, and as the patient was failing rapidly his friends were warned and the evangelist had an earnest talk with him. The next day the joint was filled with *Pond's ext. of witch hazel* diluted, which was allowed to remain for an hour and then drained off. After two days of this treatment there was a marked improvement which went on rapidly until in six weeks' time the sinuses healed and the joint recovered with perfect motion.

CASE III was a boy four years old who had had a sinus in front of the knee for six months or more. When brought to the hospital there were three sinuses leading into the joint. Under *chloroform* they were enlarged and straightened to facilitate irrigation. After about a week of treatment I left for my furlough, leaving a number of different antiseptics for his parents to use in alternation for irrigating the joint. They were instructed to take the child to Foochow hospital in case he was no better. On my return to Shao-wu I saw the child with a perfectly moveable joint. He had no other treatment except the antiseptic irrigation. His mother said that there was immediate improvement, but it was more than a year before the last sinus healed.

EVANGELISTIC RESULTS.

No. I, before he came under treatment, attended church occasionally, but was not a church member. While at the hospital he became a very earnest Christian, attributing his cure to God's goodness. Through his influence his brother-in-law and a friend, previously Christians, became earnest and are among our most promising candidates for the ministry. He himself is in the medical class, takes to surgery naturally, and best of all is a spiritual power among the patients.

No. II after his recovery rejoined the army; was transferred to Iong-k'en, eighty miles from Shao-wu. We have a church there which he joined. His officer told him he must either drop Christianity or leave the army. He chose to leave the army and went to work. Last year he left Iong-k'en, but I expect him to give a good account of himself some time.

No. III's father has entered the theological class, and is the only member of the class who does not ask the mission to help in his support while he is studying.

American Board Mission, Shao-wu, Foochow.

TRUE ECONOMY IN MEDICINE.

By W. H. JEFFERYS, A.M., M.D.

There has been running through my mind for some weeks a comment that I chanced to overhear on the subject of the so-called private rooms in a certain mission hospital in China. The criticism had been ventured that the rooms were small, dark and unattractive, and the answer that they were *fully as good as the rooms of the natives themselves*. Both the criticism and the answer were, I believe, unquestionably true.

With the criticism I have no quarrel; but the answer I should like to take as my text for a few remarks on a certain view of medical work which its sentiments represent—a view of the practice of medicine for which I have found no manner of use in America, nor should I expect to find it of better application to Nova Zembla, nor of as satisfactory to mission work in China.

The primary objects of medical mission work, I take it, are four:—

1. The practical illustration of the Christian life.
2. The cure of bodies, and thus
3. The winning of confidence.
4. The teaching of scientific medicine and hygiene.

The principle involved in my text, I am constrained to believe, accomplishes none of these. It seems to me to represent a false and superficial idea of economy which is altogether out of place in medical work of any kind and which is particularly so in mission work.

There are two sorts of economy with which one meets, on the many walks of life. THE FIRST pays the least money for the poorest thing that offers a probability of accomplishing the desired end. In medicine it pays its workers the least money for which they can or will work and thus compels them to spend a half of their time doing coolie work. It builds the largest hospital that the money will put up with rooms and hygiene "fully as good as the native ditto." It buys the cheapest instrument that can be found at the cheapest known shop. It uses the cheapest *salt of quinine* and the cheapest *bromide* on the market. It uses the thinnest dressing that will suggest the idea of asepsis. It considers that one year at a medical college is ample warrant for anything short of a gastrectomy, for the Chinese know so little themselves. It sees the most patients in the least time and dispenses its measures again in the least time, for time is money, and runs up the longest record of cases seen and operations done, and is satisfied with a good diagnostic guess. And, I suppose, this method will make Christians and cure souls of the same quality and with the same certainty as it cures bodies and makes diagnoses.

The SECOND sort of economy pays whatever is necessary to secure the best thing on the market to accomplish the desired end. It pays its workers enough to enable them to abstain from coolie labor. This results in a reduction in the number of skilled workers to be provided and nearly double the time-work units. This economy builds a hospital of half the size but of twice the durability, of better hygiene, of greater cleanliness, a hospital better in comfort, better in hygiene, better in curing power than anything based on Chinese standards, and one that is an inspiration and an object lesson to those who seek its aid. It buys the best instrument on the market, and the instrument wears well, does not go back on the operator and does its work as it should do it. It keeps in stock the more expensive *bi-sulphate of quinine* for babies with imperfect digestion, and saves twice the difference in the avoidance of *bromides* to keep the *quinine* down and *bismuth* and *pepsin* to cure the *bromide* indigestion, and it saves time by cutting off the necessity of the last three visits. It sees one-half the number of patients and stops to examine some blood and urine and an apex now and then, nor will it guess if certainty be within the reach of human effort; but it harms no one and cures the many; there is time to help and time to love. And though a patient who is cured in four visits does not show for as much in some ways as one who is partially cured in fifteen, yet is there more probability of winning the confidence and the heart of the former than of the latter. At any rate I should personally feel uncomfortable in gaining the trust of a man for whose body I might have done much more had it not been for the price of cotton. Finally, this second economy claims that no human medical course is too good to be offered in service to Him whom when sick and in prison it seeks to visit.

I remember the case of a young physician who economized by investing in a pair of obstetric forceps for the sum of three and a half gold dollars. He was poor and making money slowly and had to be careful. The first time he used the instrument a blade of it broke in two and there was some serious accident to either the mother or child or both. There was a delay, and another physician called in to extract the broken instrument. There was a law-suit which cost the economist five hundred dollars. There were lost also two items, probably of little value in this case—a practice and a reputation. But the economist saved (?) the extra three and a half dollars which a good instrument would have cost him.

I would plead that there is no true economy in curing a patient in ten five-minute visits when he might have been cured in two twenty-minute visits; that there is no economy in congesting the ears of a child with *quinine* because he has had a chill and having him develop six hours later a typical rash of scarlet fever, when a negative blood examination and a short delay would have lessened the chances of *otitis media* and saved the *quinine*. There

is no economy in a slim dressing which allows infection in an otherwise aseptic wound, and which now will require ten more such, when one good one would have finished the matter and saved a nasty scar and some confidence.

I think that I fully appreciate the value of mission money and trust that I should be slow to waste one cent of that which represents so much of sacrifice and prayer, but pearls of great price are not to be bought on the bargain counter, nor will the world be won for Christ at cheap rates.

There is no truer economy than work well done !



MEDICAL TRAINING OF NATIVE PREACHERS.

By PHILIP B. COUSLAND, M.B., C.M.

"Shall we give some medical instruction to our theological students and preachers?"

No, certainly not as theological students and preachers. It would be a good thing if all our people had some knowledge of physiology and the laws of health and of the use of household remedies, but beyond that, certainly not. The Chinese have a craze for dabbling in medicine, a craze we should discourage. For our preachers to prescribe for patients and sell medicines to them would be a temptation and a distraction, nor would supplying them with drugs gratis be any less objectionable. I know one zealous man who buys simple remedies and gives them away to urgent cases, but this is a different matter.

"Shall we set a determined face against all encouragement of quackery, and by insisting that we will sell medicines to no one except properly trained men and women, try to stem the tide which flows so strongly in the direction of anyone dispensing foreign medicines?"

Certainly. Let us do all we can to discountenance these would-be practitioners of Western medicine, and by training suitable men and women seek to supply the Chinese with fairly competent doctors. There are certain drugs such as *quinine, iron, and Epsom salts* that I sell to practically anyone, but outside of this list none but our ex-students can be supplied, and many a quack has been turned away with his dollars still in his pocket. To such an extent has this quackery grown in this region that it has actually been proposed that the church should take some disciplinary action in the matter. It is not right that a man equipped with only a copy of Dr. Kerr's *Materia Medica* should advertise himself as a practitioner of Western medicine in both its medical and surgical branches.

SELF-SUPPORT.

The writer's practice so far has been to charge for visits at the rate of a dollar per three miles and chair hire, and he has found it a decided improvement on the old plan of no fee. The number of visits is less, but the class of cases is more satisfactory, and visiting any way requires to be kept within limits or it takes up too much time. If the patient is found to be really very poor, part or whole of the fee is returned, and this always makes a great impression. If the poverty is known at the time of the request a smaller sum or nothing at all is charged. The fee is always brought when the request is made. Where suitable, a trained assistant is sent instead of the foreigner.

No charges are made during dispensary hours, except in the case of *cod liver oil, iodine, Easton's syrup*, and such like somewhat expensive medicines. In these cases the price is noted on the prescription sheet and collected by the dispenser.

Any patients wishing to be seen out of order in the dispensary, or at other hours or days, pays twenty cents consultation fee and buys his medicine. This plan of consultations is fairly popular, but is a distraction to the medical man.

Some patients go directly to the dispensary and buy another supply of their medicine to save waiting their turn to be seen. Others come to purchase household remedies. This has grown to be a nuisance,—so much of the dispenser's time is taken up dispensing these drugs and counting the cash received, and as the latter can't be checked it is a temptation to embezzlement. So, last autumn, a room in the hospital frontage was fitted up as a shop and a door cut into the street. This shop was stocked with a small selection of medicines put up in certain quantities (also with books and milk) and an untrained man put in charge, with the help, in the case of the books, of the hospital preacher. This is proving a real relief to the dispensary and an accommodation to many patients, for they can now buy without trouble at any hour of the day. Medicines and milk are sold at a slight profit; in the case of the milk a very slight profit. Nowhere else in the city could the patients be properly supplied.

So far it has been a matter of feeling one's way along the lines of least resistance, and the question now arises what further developments are feasible and expedient. The crux of the whole problem of self-support seems to be this: considering how scanty mission funds are, should not all who can pay do so as far as they are able, and if this be granted then how can it be accomplished without keeping away patients, giving an impression of the commercial spirit that Dr. Gillison rightly deprecates, leading our helpers into temptation, and occupying the time of the medical missionary with financial work, already time-absorbing and irksome enough.

The plan of charging fees for registration is simple, but does not seem to be the right one. At the native dispensaries, and indeed at some home ones too, consultation is free, but medicines must be bought. This surely is the line along which we should develop our self-support. But how to arrange a scale of charges that will be simple financially, present the fewest temptations to the native staff and that can be easily checked? What methods are in vogue or what suggestions can any one make? As a simplifier of accounts I can recommend teaching one's assistants the use of Romanised. All one has to do is to run one's eyes over the items and check the arithmetic.

In-patients should be as free from all charges as possible. We want to encourage all who can to come into the wards, where our evangelistic and medical opportunities are greatest, and giving up work and feeding themselves for the period of their stay is a heavy enough tax on their funds.

It is urged that hospital funds should come in the main from subscriptions, but what is to be done where they are few and far between? As far as I can gather, unless at the treaty ports, subscriptions from the Chinese amount to an insignificant sum. Since we are supposed to be rolling in wealth and our hospitals supported by the home governments why should they subscribe? On the back of my registration cards there is a notice that this hospital is *not* supported by government, only by voluntary contributions, and a suggestion that those who can afford to meet in whole or in part the price of their medicines should do so. Would it be a good plan to mention the total amount of home aid and say the rest must be raised locally? On no account should the total expenses be stated, as they would seem so ridiculously small that either all confidence in one's statements would be lost, or else it would be concluded that the medicines were extensively watered. At least so the Chinese here say.

As to charging for operations, I confess I have not yet seen my way to do it.

The whole business of taking fees is a repugnant one, and I hardly ever receive one without wincing and wondering if the giver thinks that I, who am lavishly supported by my government and sent to do good deeds for some inscrutable purpose, am taking the opportunity to make a little out of it. But all the same I am persuaded that the principle that all who can should pay something towards the expense of their treatment is the right one, and that it can be carried out beneficially if carefully worked and gradually developed.

Burn's Memorial Hospital, Chao-chow Foo.



Medical and Surgical Progress.

Medical.

Under the charge of ROBERT T. BOOTH, M.B., B.Ch., R.U.I.

ALCOHOL IN CARBOLIC ACID POISONING.

In the American Year Book of Medicine and Surgery, 1901, attention is drawn to the above subject. Wilcox and Stevens sum up some of the reports on the antidotal action of *alcohol* in *carbolic acid* poisoning. Rodman reports a case in which about two ounces of the pure acid had been swallowed. The patient was in a state of profound collapse. Four ounces of *alcohol* were poured into a stomach tube passed as far as the pharynx. Two or three minutes later the tube was pushed down into the stomach, and the latter was then washed out with warm water and again with diluted *alcohol*. Within an hour consciousness had returned and the general condition was much improved. In a few days recovery was complete. Another writer investigated a large number of reported cases of *carbolic acid* poisoning. He found that when no *alcohol* was given in cases in which the patients were known or believed to have retained sixty grains or upward of *carbolic acid* the termination was usually fatal. On the other hand, in all similar cases in which *alcohol* was given the patient survived. *Success in treatment depends largely on promptness.*

TREATMENT OF COUGH IN PHthisis.

In the *Edinburgh Medical Journal*, Arthur Latham, M.B., M.R.C.P., writes on this subject. He says, cough in phthisis is too frequently treated in a routine manner with expectorants and *anodynes* without investigation of its cause. In many cases it arises from accessory conditions which should be treated. Thus, a girl in the last stage of phthisis was almost prevented from

sleeping by cough. She had been dosed with *anodynes*, which only deranged her digestion. The cough was due to pleurisy, and practically subsided when the chest was strapped. Cough may be due to exposure, to sudden differences of temperature, such as going from a hot to a cold room, getting into bed with cold sheets, exposure to wind or dust, and to exertion, such as rapid walking. Other causes are pleuritic irritation, or dryness of the throat; the latter may be brought on by the use of *belladonna* for night sweats. Distressing cough may come on after taking food and end in vomiting. It is due to various conditions of the stomach which stimulate the vagus nerve or to tenacious mucus tickling the fauces. The necessity of removing fluid accumulated during the night causes the morning cough of phthisis. Cough in advanced cases is brought on by the accumulation of material in phthisical cavities or by a sudden change in position. Chronic catarrh of the pharynx is the main cause of cough in a surprisingly large number of individuals who live in large towns. Other causes are tracheitis, laryngitis, whether tuberculous or not, and intercurrent bronchitis. The ideal conditions for the treatment of consumptives may be summed up as follows:—

1. An absolutely regular life without fatigue.
2. Good food sufficient to establish and maintain the normal body weight.
3. A constant supply of fresh air at a uniform temperature and absence of all sources of irritation from dust and the like.

As regards the cough, it is most important that the patient should never be subjected to any sudden change of temperature, or to any source of irritation, reflex or other. Unfortunately

patients cannot live under these ideal conditions. In such cases efforts must be directed towards improvement of the general condition, and increasing the resistance of the cells to the tuberculous and pyogenic micro-organisms. For this purpose *cod liver oil*, small doses of *creasote*, or its improved forms, *guaiacol* and *creasotal*, may be given. The cause of the cough must first be determined. If it is due to some definite pathological change, before prescribing always consider whether medicines will interfere with the digestion. It may have to be decided that the relief of the cough is more pressing than the possible harm to the digestion. For instance, a patient may be steadily losing ground from want of sleep brought by a distressing night cough. In such cases *opium* may be necessary, but the price at which sleep is bought must not be forgotten. All measures should be exhausted before using such drugs as *opium*, *chloral*, *henbane*, or *bromides*. Be careful of prescribing sweet syrups and the like. If it is decided to treat the cough with drugs, it must be further determined whether the expectoration is to be encouraged or diminished. The cough which occurs first thing in the morning and is accompanied by expectoration is useful, and must never be checked by a sedative. It can be aided by giving, before the patient rises, a warm drink, such as milk, tea, rum and milk—dessertspoonful of rum to a claret-glassful of warm milk—or some alkaline draught. If this cough is accompanied by sickness, as is not infrequent, determine whether the sickness is due to the condition of the stomach or whether it is brought on by reflex irritation of the fauces by thick mucus and the like, and prescribe appropriate remedies (vide infra). It is important that in spite of sickness a satisfactory breakfast should be taken. When the dry hacking cough, which is so common in phthisis, is present, first ascertain the condition of the upper air passages. If inflammation exists it

must be treated. The chronic granular pharyngitis, which is often the cause of this dry cough, is best treated with some such application as the following:—

R. Iodi	5.20 gr.
Pot. Iod.	20.75 gr.
Ol. Menth. Pip.	1.3 minims.
Glycerin.	1 ounce.

To be painted over the back of the throat night and morning.

Temporary relief may sometimes be obtained by means of *liquorice*, *cocaine*, or *morpbia lozenges*. A congested throat in cases in which the tongue is clean and the temperature but slightly raised, is frequently benefitted by a mixture such as the following:—

R. Tr. Ferri. Perchlор.	10 m.
Pot. Chlor.	10 gr.
Acidi Hydrochlор.	5 m.
Tr. Aurantii,	$\frac{1}{2}$ dr.
Aq. ad	1 ounce.

To be taken thrice daily.

If the throat shows no signs of disease, but is simply irritable, the cough is not infrequently relieved by twenty to thirty grains of *bromide* at night, as this acts on the upper air passages as a sedative.

Tracheitis is not uncommon, and often yields to the following mixture:—

R. Soda. Bicarb.	15 gr.
Acid. hydrocyan. dil.	1 m.
Syrup. prun. virg.	$\frac{1}{2}$ dr.
Aq. ad	1 ounce.

to be taken three or four times a day.

In some cases it may be necessary to add a small dose of *morpbia* to this mixture; in others *sod. sulphate* may replace the *sod. bicarb.*

If the cough is due to disease of the larynx, nothing is so good as fresh air at an even temperature. If drugs are necessary a two per cent. solution of *cocaine* in the form of a laryngeal spray, inhalations of *oil of peppermint*, *menthol* and the like may be used. If the dry hacking cough is due to pleuritic irritation, it frequently yields to appropriate remedies. If the pleurisy is apical

nothing is better than counter-irritation with equal parts of the *liq.* and *tr. of iodine*, or with a blister ; if the irritation is basal nothing succeeds so well as strapping of the lower chest. When no cause can be found for this dry cough the practitioner may be forced to treat it with *anodynes*, on the same principles as the irritative night cough is treated.

Some simple linctus may be tried such as :—

R,

Vin. Ipecac.	5 m.
Spt. Chloroform.	2 m.
Tr. Tolutan.	5 m.
Succ. Limon.	15 m.
Mucil. Acaciæ.	1 dr.

To be taken when required.

Or some form of simple lozenge, such as

B.

Ext. Glycyrrh.	3 gr.
Ol Anisi	$\frac{1}{2}$ m.
Massæ. Trochisorum acac.	10 gr.

If these measures are unsuccessful, *codeia*, *heroin*, or some other form of opium must be tried. For this purpose the following linctus is as effective as any :—

B.

Acid. Hydrocyan. dil.	1.2 m.
Liq. Morphin. acet.	3.8 m.
Oxymel. Scillæ et aq. ad	$\frac{1}{2}$ dr.

Or *trochiscus morphinæ* (B. P.) or the *trochiscus morphinæ et ipecac.* may be prescribed. Do not forget, however, that this incessant hacking cough—whatever its origin—is not infrequently kept up by the irritability of the nervo-muscular mechanism of respiration. In such cases food, stimulants, and nervous sedatives are the best remedies. When the cough is of gastric origin such sedatives as *hydrocyanic acid* or *bismuth salts* combined with vegetable bitters may be necessary. In some cases a counter-irritant over the epigastrium is useful, in others a gargle of fresh effervescent soda water gives relief. When the cough is due to associated catarrh of

the large bronchi, it is best to promote expectoration for a few days by some alkaline mixture containing sodium bicarbonate, or *pot. iod.* may be added. If the mucus is peculiarly tenacious no drug succeeds so well as *ammon. chlor.* in ten to fifteen gr. doses thrice daily ; the taste being disguised by *ext. glycyrrh. liq.* etc. In the later stages of consumption when excavation is present the aim is to get rid of the matter which accumulates in the cavities and larger tubes. There is no remedy which does this so effectually and with such benefit as *creasote* in the form of vapor. Small doses of *creasote* and its derivatives are useful in checking expectoration when this is very profuse. *Turpentine* may also be given for this purpose. In the final stages of pulmonary tuberculosis opium must unfortunately be largely relied upon for the relief of the cough and other distressing symptoms.

In sum. (1) Determine the direct cause of the cough ; (2) Place the patient as far as possible under ideal conditions for building up the tissue resistance, and avoid all causes of pulmonary irritation ; (3) Never give drugs until all other measures have failed, and then never without considering the question whether in treating the symptom the disease is not aggravated.

AN EARLY SIGN OF PHthisis.

Walker Overned, M.A., M.D., writing in the *Lancet* for August, has an interesting article on this subject. He says, in many cases of pulmonary phthisis, but particularly in those in which the ordinary initial deposition takes place in the upper lobes accompanied by dulness in the supraclavicular and supraspinal areas, a number of venous varicosities one-third or two-thirds of an inch in length may often be observed near the spines of the seventh cervical and three upper dorsal vertebrae. They appear early and may become very conspicuous.

At times they become apparent after stretching the skin laterally. Local pain is occasionally felt, and slight oedema may be found over the spines. The following is an example:—

The patient, aged twenty-six, had suffered from cough since the beginning of April, 1901. In the middle of May there were at the left posterior apex crepitant rales, followed by a slight expiratory murmur; in the lower lobe a click succeeded each inspiration; at the right posterior apex coarse rales were audible and in the lower lobe many rhonchi. Numerous varices were visible around the upper dorsal spines; they occurred sparingly all over the left back as low as the angle of the scapula.

The anatomy of this region explains the origin of the varicosities. The venous network (dorso-spinal) which lies around the dorsal spines, furnishes branches which pass forward between the transverse processes to join the vertebral veins in the neck and the intercostal veins in the chest.

The vertebral veins emerge from the transverse processes in the 6th cervical vertebra and terminate in the innominate. The veins of the upper two or three left intercostal spaces unite near the bodies of the vertebrae to form the left superior intercostal vein, which passes across the arch of the aorta to enter the left vena innominata, and the left bronchial vein opens into it. The right superior intercostal vein enters the vena azygous major. The obstruction may consist of enlarged bronchial glands in the root of the lung pressing upon the left superior intercostal vein during its passage across the arch of the aorta, or a thickened pleura may affect injuriously the course of the vein or any of its tributaries and lead to distal engorgement. The upper pulmonary lobes lie tightly fixed within the three upper ribs, and they reach from the 6th cervical vertebra to the 3rd dorsal spine. The varices occur first within this area, between the spines and the edge of the shoulder blade. Patients

suffering from emphysema, asthma, bronchitis, also exhibit varicosities, but these are scattered over the chest, both front and back and along the margins of the lower ribs. When the signs of obstruction disappear, the dilations disappear, but the process requires some months. As the patient increases in weight and the subcutaneous fat becomes thicker they naturally become less visible.

TREATMENT OF SUMMER DIARRHÖEA IN INFANTS BY EXCLUSIVELY WATER DIET.

To most practitioners in the east every summer brings cases which are a great anxiety. No cases, though, give rise to such trouble and anxious thought as the diarrhoea which is so frequent among children; it is therefore with great joy that we hail anything that will in some marked manner produce good result and so relieve the anxiety of parent and doctor. In the *Clinical Journal* for July there is an interesting article on this subject. J. D. Windle, M.D., writes as follows: The amount of water lost in the stools and by vomiting and perspiration is out of proportion to that taken; in most cases none is absorbed, for vomiting is constant. The excess must come from the blood and tissues. Thirst is the cause of the restlessness and moaning-symptoms often wrongly interpreted as due to pain. The great loss of weight, sunken fontanelles, flaccid skin, scanty micturition, dyspnoea, and cyanosis, are due to the dryness of the blood and tissues. The vital indication is to supply water, which at once relieves the most urgent symptoms—thirst and vomiting. The blood vessels of the stomach suck up the water like a sponge. The emptied vascular system is refilled, blood pressure is raised, and the heart regains its vigor. The child will probably fight shy of the first teaspoonful, fearing probably it is beef-juice or medicine, but the greed with which the next and all water,

given up to half a pint, is taken, the satisfaction, the calm, and the sleep which ensues, show how badly water is needed.

Food and "stimulants" are harmful; if they are retained attempts at digestion and absorption take place. Water, which should be boiled, supplies all that is essential. The mucous membrane rests and recuperates, so that after twelve to twenty-four hours it is fit to resume light work. Moreover, in addition to relieving urgent symptoms, the water is directly curative; it dissolves the absorbed toxines, the kidneys again become active and eliminate them. The intestinal bacteria die from inanition; their pabulum is cut off. When the urgent symptoms have ceased—as they almost invariably will do in twelve to twenty-four hours—milk may be given in very dilute form; water must yet constitute the chief aliment. For the first day one part of milk to twenty of water is given. From day to day the amount of milk is increased until the normal proportion is reached. The exclusively water diet may be continued with safety up to forty-eight hours, but only very rarely is it required after twenty-four hours, when diarrhoea and vomiting have ceased. Tepid sponging if there is fever, hot dry packs if there is collapse, and large linseed meal poultices to cover the abdomen if there is pain, are valuable auxiliaries.

In addition to the above I would like to suggest the advantages to be derived from washing out the stomach through a tube passed through the nose, and, from the use of large water enemata. These allow absorption and at the same time remove the toxines.

SPONTANEOUS RUPTURE OF THE

ABDOMINAL WALL IN ASCITES.

In this land of enlarged spleens and abdomens distended with ascitic fluid I have not yet heard of a case of spontaneous rupture. It is well though to know that such a thing may happen, as

has been reported in the *Bulletins de la Soc. Med. des Hôpitaux*, July 19th, by M. Pierre Merklen and M. Gougelet. A woman, aged sixty-eight, who was addicted to alcohol, had ascites for nearly two years, probably from scirrhosis of the liver. The heart was weak, and there was oedema of the lower limbs. From May, 1899, to February, 1901, paracentesis abdominis was performed twenty-five times, from fourteen to sixteen litres of fluid being removed on each occasion. There was an old umbilical hernia. The abdominal distension caused the aperture to enlarge until several fingers could be passed into it, and the hernia had become as big as a large orange. The umbilicus gradually became thinner, and in December, 1900, little blackish scab appeared on its summit. This disappeared after paracentesis, but recurred. On March 15th, 1901, seventeen days after the twenty-fifth paracentesis, the scab fell off, revealing a fistula with suppurating walls and of the size of the meatus urinarius. Ascitic fluid at once began to flow. The patient, seated on a chair, voided the whole in about two hours. Next day there was continual oozing with disappearance of the abdominal swelling and the oedema of the legs. But abdominal pains and fever came on, and on the following day there were intractable vomiting and dry tongue. Death from peritonitis occurred on the seventh day after rupture.

Spontaneous rupture of the abdominal walls in ascites is of rare occurrence. Most of the cases belong to a period when paracentesis was less practised than it is now, and the operation is not mentioned in the records. The umbilicus was most frequently the seat of rupture. An umbilical hernia often prepared the way for distension and sloughing of the umbilical cicatrix.

In cases of ascites complicated by a communicating hydrocele, rupture has taken place in the scrotum. Rupture is most likely to occur where the skin

is thinnest. But it has occurred in the abdominal wall between the pubes and umbilicus, after phlegmonous gangrene. Otherwise it was preceded by greater or lesser sloughing of the skin and suppuration. Hence the danger of peritonitis. Death is the usual result of rupture at the umbilicus. Rupture of the abdominal wall in cases of ascites should be prevented at all costs. The only treatment when sloughing is threatened is to frequently perform paracentesis.

THE FREEZING POINT OF THE BLOOD

(CYROSCOPY) IN PROGNOSIS.

Alexander Ogston, M.D., Aberdeen, has an interesting and instructive article in the *Lancet* for November 9th, 1901, on this subject. 'Cryoscopy' or the determination of the freezing point of fluids has recently been much in vogue on the continent, and it seems as if it would prove of great advantage from a clinical point of view, in both surgical and medical cases. It has been pointed out by two competent observers that fluids freeze at a lower temperature the greater the quantity of impurities dissolved in them. Korányi showed that the freezing point of normal blood is 0.56° C below zero. From this point it does not vary more than one hundredth of a degree up or down. Urine is not so stedfast, varying in its freezing point from -1° to -2° C., in proportion to the solids which it contains. Koráyi's observations have been applied to the study of abnormal blood by many German and French writers. It has been found that as long as the blood is healthy and its effete constituents are adequately eliminated it retains its normal freezing point, viz., 0.56° C., or varies within one hundredth of that figure, that is to say, from -0.55° to -0.57° and that if elimination becomes defective the freezing point sinks below this to -0.58° , -0.60° , or even to -0.71° . These observers appear to have mainly studied the

purification of blood by the kidneys, the measurement of which is defective. Surgeons find this when operation is proposed in renal cases. They strive to ascertain how much disease exists; whether the amount of healthy kidney is sufficient to so purify the blood that the operation will heal well, whether the lessened elimination that follows operations, especially if performed under anaesthetics, superadded to the already existing defect, is likely to be fatal; and when one kidney is to be operated on, whether the other is sound enough to do the work of both. To these questions, hitherto imperfectly answerable, cryoscopy promises to furnish a satisfactory reply. It will probably prove to be of no less value in determining the existence and degree of "*hepatism*" threatening life or imperilling operations—a condition regarding which little is satisfactorily known.

The determination of the freezing-point is carried out by Beckman's apparatus. It consists of a jar of ice and salt into which dips a large test tube, into the mouth of which is inserted through a perforated cork a smaller test tube about an inch in diameter, so that an air chamber is left between the two. The fluid to be frozen is put into the inner tube. Beckman's thermometer, the scale of which is marked in one-hundredths of a degree, is used. In cryoscopy of the blood the sample to be tested may be drawn from any large vein in the hand, wrist, or forearm, or from the usual venesection position at the bend of the elbow. It may be drawn directly into the apparatus or, better, into a stoppered bottle where it can be secured until cryoscopy can be performed. Coagulation makes no difference in its freezing point, which is found in the manner of that of distilled water. Ogston then reports several cases showing the advantage of this test in cases about to be operated on for radical cure of hernia. One of these will be sufficient to quote. A man wished to undergo a radical cure of

inguinal hernia. The urine was free from albumen or sugar, and he appeared to be very strong; but a slight yellowness of the conjunctiva suggested "hepatism," that insidious foe of the operating surgeon. The blood froze at -0.58 C, i.e., two-hundredths of a degree below normal. The operation was declined and a truss was fitted. He died four months later. He would certainly, save for the curoscopy, have been operated upon probably with a fatal result.

What the outcome of this test will be in the future it is difficult to say. The apparatus is one that can be easily fitted up.

A SIMPLE FORM OF BATH.

Stanley Arthur Bull, M.D., Lond., F.R.C.S., L.R.C.P., writing in the *B. M. J.* for January 11th, 1902, reports on a simple and effective form of bath for use in such cases as enteric fever when any great movement is contraindicated. It consists of a piece of mackintosh sheeting eight feet by four feet, the sides of which are looped to receive the stretcher poles; the latter should be at least eight feet long, and one and a half inches in diameter. In order to apply the bath, for example, in the case of a patient with enteric fever, lying on his back in the centre of an ordinary hospital bed, the patient is gently semirotated, so that he lies, say, on his left side and near the edge of the bed; the mackintosh sheeting, half rolled up, is introduced under him in the same way as a draw sheet; he is now moved again on to his back, and thus lies

in the centre of the sheeting. The stretcher poles are now run through the looped sides of the sheeting and secured to the end of the bed—if rounded, by a simple sling; if square, they rest on them. If the head and foot of the bed are not raised, a simple support of wood for the stretcher poles to rest on is all that is necessary. The pillow is now introduced under the patient's head, beneath the mackintosh, and the sheeting at the foot is secured by a safety pin. The bath is now ready, and water of the required temperature can be introduced in sufficient quantity if necessary to cover the patient's body entirely.

When the bath is over one of the stretcher poles is drawn out, and the water allowed to flow into a receptacle at the side of the bed; this it does very readily if the bed be slightly tilted. The second stretcher pole is now drawn out, and the mackintosh sheeting removed in the reverse way to that in which it was placed beneath the patient.

This form of bath, which has been in use in the Coromandel Hospital for several years, is thoroughly efficient, and possesses the following advantages: cheapness, simplicity of construction; it can be applied by one person, though two are preferable; is not regarded by the patient or friends with the same suspicion as the moveable metal bath; can be applied to any form of bed; is very portable; and it can be used with very slight movement of the patient (simply by one semi-rotation of the body before the bath, and a second after it).

Surgical.

Under the charge of J. PRESTON MAXWELL, M.B., B.S., F.R.C.S.

THE APPLICATION OF GLANDULAR EXTRACTS IN SURGERY.

One of the most remarkable advances during the past few years has been the application of glandular extracts in the treatment of disease.

The action of *thyroid* extract in myxœdema and allied conditions is too well known to need comment. The same extract is still on its trial as regards the treatment of mammary cancer, and so far as the writer has observed its use, it is not likely to be more than a passing experiment. *Supra renal* extract bids fair, however, to be a valuable contribution to the surgeon's outfit.

In a couple of cases recently reported in the *Journal of a London hospital** obstinate haemorrhage, in the one case from the nose, and in the other case from the uterus, was arrested at once after the application of a solution of this extract in the strength of five grains to oz i.

Dealing as one has frequently to do with obstinate haemorrhage in patients run down with malarial fever, it is possible that this extract, which can be procured in tabloid form, may be very useful in tropical work. It may also be found useful in such operations as thyrotomy, etc., where a local vaso constrictor is of great use in diminishing oozing and enabling an operation to be more thoroughly and quickly accomplished.

THE TREATMENT OF SEPTIC PERITONITIS.

Autotoxæmia from the paralysed bowel in cases of general peritonitis undoubtedly plays a large part in bringing about a fatal result.

And the condition known as ileus which often follows on extensive abdominal operations probably owes its

* *St. Bartholomew's Hospital Journal*, November, 1902.

gravity to the same cause. Hence any method which will ensure the emptying of the bowel in these cases, commends itself to the surgeon who practises this class of work.

The value of the *turpentine* enema and the *alum* enema in these conditions is well known, and a new method has recently been brought forward by Mr. Sheild in the *British Medical Journal* of December 28th, 1901. The author there relates his procedure, which is to throw into the bowel, with a fine hypodermic needle, a solution of *magnesium sulphate*, dr. iii. with *tr. nucis vom. m. x* and *glycerine*, dr. i, in an ounce of water. Two hours after, this has been supplemented by a *turpentine* enema.

This is a perfectly easy procedure when a case of acute septic peritonitis submits to operation, and it is a question whether in some of the cases of ileus the same method might not be employed with advantage. A small opening into the abdomen is easily made under *cocaine*, and there is little chance of setting up leakage if the injection needle is passed obliquely into the bowel.

THE STERILIZATION OF CATGUT.

Several papers have lately appeared on this important subject. There is no doubt that for many surgical cases in the East catgut is greatly to be preferred to silk. At the same time it takes longer to prepare, and needs, moreover, greater attention than silk.

The old method which I still consider to be superior to all others was the following: The catgut is evenly wound on planed boards and scrubbed with soap and water, a nail brush being used. The boards are then rinsed in water and it is scrubbed with a little *turpentine*. The boards are again rinsed and stored in a solution of *biniodide of mercury*, 1-500, and are

ready for use in the course of three or four days.

But this takes time and trouble, and a method which is quite reliable is to wind the gut on glass reels, put these in absolute alcohol in a heavy brass case, with a cover which screws down well, and boil the case for twenty minutes. The gut can then be stored in alcohol or in *biniiodide of mercury* solution. These heavy brass cases can be got for a small price at any instrument makers. Gut prepared by this method ties well, but is not quite so pliable as that prepared by the first method given. Another method, which has been recommended by Dr. Ball of Dublin, is to wind the gut on glass reels, soak in a five per cent. solution of *formalin* for twenty-four hours and then boil in water, after having first rinsed the *formalin* off in cold water for five-ten minutes. Lastly the reels are placed, until use, in the following solution :—

Mercury Perchloride 1 part.
Boiled Glycerine 250 parts.
Methylated Spirit 1,000 ,,

THE SYMPTOMS AND TREATMENT OF MOVEABLE KIDNEY.

This important subject has again come under discussion, and seems still likely to engage the attention of surgeons. Its frequency is as yet undecided and may remain so for some time when one considers that it is placed between one per cent. and forty-six per cent. by various clinical observers.

There in no doubt that it may exist without causing any symptoms, there is also no doubt that it may cause, in persons of a neurotic temperament, most exaggerated symptoms.

Pain, paroxysmal or persistent, digestive disorder, such as vomiting, colic or constipation, polyuria, and jaundice from dragging on the bile duct, or kinking of the ureter, respectively, are the main symptoms apart from the actual physical signs of the disease.

The remedial measures resolve themselves into three classes—rest in bed, an abdominal belt, or an operation. The efficacy of rest is absolutely denied by some and doubted by others, and although a belt may give temporary relief there is always the danger of hydronephrosis occurring and the necessity for leading a more or less invalid life. Morris claims to have cured about ninety per cent. of his cases by operation, but of the nervous cases only about half were relieved.

At the time of operation it is important to feel for stone in the kidney, as if this be present a nephrotomy is indicated in addition to the nephropexy.

The usual operative measures are known as Vulliet's, Tuffier's and Morris'; and of these the one must be chosen best adapted to the case in question. Interrupted sutures may safely be passed through the parenchyma of the kidney and stitched to the parietes, the capsule being left intact.

Obstetrics and Gynecology.

Under the charge of ELIZABETH REIFSNYDER, M.D.

ABLATIO PLACENTÆ.

Dr. Rudolph Wieser Holmes, in the December, 1901, number of the *American Journal of Obstetrics and Diseases of Women and Children*, has a most exhaustive article on the above not unusual condition, and while only a very little can be quoted his little may help some of us who

deal more with the abnormal than the normal in "Chinese" midwifery. Dr. Holmes says: "The condition of premature detachment of the normally situated placenta is one which has been given too little attention by obstetricians; its frequency has been greatly underestimated, its mortality has been judged too high, and its treatment is still a moot question."

As to its frequency "it cannot be expressed in satisfactory figures. In all probability many sudden deaths in pregnancy and labor are due to this form of the hemorrhage." The following case is cited:—

"Mrs. H. B., Russian Jewess, age not known, ix para, term; Chicago Lying-in Dispensary, service of Dr. DeLee. Previous pregnancies normal, with exception of one miscarriage. Pelvis normal. Pendulous abdomen from rapid child-bearing. Labor began December 23rd, 1897, 10 p.m.; December 24th, 1.30 a.m., cervix partially effaced and os admitted one finger; membranes not palpable. Head in R. O. P. Strong contractions, slight occasional hemorrhage. 10 a.m. os admitted three fingers. Contractions very severe, but labor progressed very slowly for a multipara. 2.40 p.m., complete effacement and dilatation; 2.45, spontaneous rupture of membranes. For some time contractions had been irregular; mother getting weaker; hemorrhage more severe. Preparations made for instrumental delivery, but birth spontaneous at 3.30. Child asphyxiated; weighed ten pounds. Placenta expelled with child, and old clots and dark blood. Placenta showed areas of partial separation, and near one border a depression was visible, the size of a hen's egg, which was filled with an old clot. Placenta normal microscopically. Opening of membranes on side. Child died in thirty-six hours from broncho-pneumonia. Duration of labor, seventeen and one-half hours; of condition, about fourteen hours."

Now, as to diagnosis. Dr. Holmes claims that "a close investigation of each case is necessary, and requires a differentiation of ablato from placenta previa, uterine rupture, acute hydramnion, fainting attacks and abdominal colics."

"The characteristic signs; an often premonitory nausea, or emesis, depending on reflex causes, pain localized or general through the abdomen, with an unusual increase on pressure, and

may be continuous, tumultuous fetal movements for a brief period, uterine distension with possible accessory tumor, an unaccountable anemia which is cleared up by uterine examination, or often escape of serum from the vagina, are strong evidences; and a failure to find the placenta within the reach of the finger makes diagnosis very certain."

In rupture of the uterus the accident occurs late in labor in nearly all cases—usually after the evacuation of waters. Where ablato occurring late in labor may offer great difficulty in differentiating from rupture, a careful post partum examination of the secundines will clear up all doubt.

Briefly, Dr. Holmes' conclusions are as follows:—

1. The etiology is generally dependent on pathologic conditions and exceptionally on traumatism.

2. As a pathologic entity, ablato occurs once in about 200 pregnancies and is of clinic importance once in 500.

3. To put it in paradox, ablato is an abortion in the latter months of pregnancy. In mild instances the patient may tide over and go on to term with a living baby. The severe may be likened to an inevitable abortion relief, coming only with the evacuation of the uterus.

As to treatment:—

4. *Mild cases* to be most carefully watched. Quiet is a *sine qua non*; it may be induced by *morphine*; *hydrosytin* may be given instead of *ergot*.

5. *Severe cases*.—Treatment modified by condition of the os. If the os is prepared for delivery, use forceps, craniotomy, and version, choosing the operation in the order named.

6. *Severe Cases not in Labor*.—As rapidly as possible labor should be induced—friction, electricity, *ergot*, *quinine*, and sugar; *hydrosttin*, *stypticin*, *salt solution*, and *gelatin* solution; Barnes' bag with traction on the tube stem, which should be continuous, as it dilates the os as well as stimulates uterine action.

7. *Severe Cases in Labor*.—Hasten labor as much as possible.

8. The tampon should have no place in the treatment of ablatio. The membranes should be preserved intact until delivery may be expedited.

9. Cesarean section never be popular, owing to unfavorable conditions and surroundings.

10. If the placenta does not follow the child at once, remove it immediately. Have all necessary equipment at hand to treat post partum hemorrhage, which is a frequent sequence of the condition. Tampon the uterus early.

Prevention of Abortion.—Peter Horrocks (*Medical Record*, November 9th, 1901), advises: Avoid overstrain, shock, and fright; operations not to be performed unless needful, especially extraction of teeth.

Avoid using instruments about uterus and cervix, and also avoid syringing. Pessaries should not be worn after the fourth month.

Purging should be avoided, and enemata, especially with turpentine or glycerine. Constipation should be avoided. Pelvic tumors may be pushed up into abdomen or even removed. Endometritis must be cured. Uterine displacements must be remedied. Certain emetic drugs must not be given, such as ergot, sarsaparilla, digitalis, quinine, lead. Syphilis should be treated in both father and mother, and very often it is useful to give small quantities of mercury throughout pregnancy. Alcohol should not be taken to excess, and in most cases avoided altogether.

Fissure of the nipple has been successfully treated by many physicians with *orthoform*. A few drops of saturated solution of *orthoform* in eighty per cent. alcohol applied directly to the crack, and a dry compress is then placed above.—*N. Y. Medical Record*, November 9th, 1901.

Skin Diseases.

Under the charge of KATE C. WOODHULL, M.D.

TREATMENT OF ECZEMA.

W. R. Inge Dalton says, in a lecture reported in the *Philadelphia Medical Journal*, July 13, 1901: "I still adhere to my theory, enunciated at Atlantic City last June, that the chyme passing in a hyperacid condition from the stomach into the duodenum entails such increased labor upon it that its contents cannot be rendered sufficiently alkaline for physiologic metabolism. This acid dyscrasia I believe to be the inevitable *fons et origo* of the pathological lesions which lead certainly to nearly all the diseases of the skin. I am still devoting my energies particularly to the study of the *vis medicatrix naturae* which the system holds and which empowers it to overcome the causes of skin diseases, especially eczema. A successful and rational treatment, a thorough therapeutic method, confirm me in my determination to pursue

assiduously the same object, viz., the elimination of the uric acid diathesis before and in conjunction with topical applications. I am watching with great interest the results of serum therapy. While I believe the serum does not kill the germs directly, it acts in a secondary manner by influencing the white corpuscles of the blood to greater activity. Metschnikoff ascribes their action to phagocytosis, Buchner claims the alexin (the defensive powers of the blood) originates in the white corpuscles. If these theories are correct, then it is of paramount importance that the vitality, strength, and general health be not impaired. Treatment must consist in taking into consideration the general underlying conditions, not forgetting the state of the disease, the necessary attention to any abnormal condition of the other organs which may aggravate, or continue the inflammation. Those patients suffer-

ing from chlorosis, or anemic subjects, should have tonics, such as *phosphorous, iron, strychnia, and mineral acids*. Above all, a dietary should be strictly enforced. Meat, if allowed at all, only once a day. No oatmeal, no strawberries, no sugar—not even in coffee or tea. This dietary is to be adhered to for several weeks. Water in large quantities should be drunk every day. Gottlieb favors a milk diet for some time. The alimentary canal should be kept as antiseptic as possible by means of the administration of *naphthalin, charcoal, and ippecac*.

For the so-called strumous diathesis he uses the following:—

Amon. Sulph. Ichthyolat.....	dr. 3
Acid Arseniosi.....	gr. 4
Glycyrrhizae....q. s. et ft. Pil. No. 180	
M. Sig. 1 or 2 after each meal.	

Those cases where the surfaces are excessively influenced by inflammation (vesicular) forms should be treated by removing all causes of it. Water, for all bathing purposes, in all eczemas, should be prohibited as far as possible, unless rendered alkaline. A good lotion for the bath is *soda bicarb.*, one part to fifty of water. All irritants, thermic, chemical, or mechanical, scratching with fingers, the secretions from sweat, the use of soap, etc., should be first. If there are scales or crusts, an oleaginous application, such as olive oil, after hot water and lotion of green soap, may be used. Of course if the eczema is caused by parasites, or is of the form called by Unna, *eczema-seborrhoeicum* (undoubtedly caused by microorganisms), such as pediculi, the itch insect, or the trichophytoma, germicide is demanded, such as kerosene oil, *salicylic acid, sulphur ointment*. A five per cent. ointment of *chrysarobin* and *pyrogallol*, or *ichthol*, or tar preparations in the squamous varieties, if there is not much secretion, ought to be exhibited. Finally, those etiologic factors, springing from neurotic conditions, enemias, leukocytopenia, constipation, etc., or whether the cause be local or external,

internal, or general, should be completely regulated, and appropriate remedies prescribed.

As physicians are so constantly called to treat eczema, which often proves so intractable, any new light on the subject is most welcome.

The following suggestion by Dr. Henry Waldo (*Medical Press*, August 14th, 1901), seems very reasonable:—

The author thinks the sound parts of the skin should be washed daily with soap and water, as by so doing the eczematous surface is much benefited, and illustrated this by stating that if a different application is used for each side of the body in a symmetrical eruption, it must not be taken as a test of the relative value of the two agents, as one side always responds to a successful treatment of the other. This sympathetic relation of the two sides should be therefore taken into account by cleaning and polishing the general surface of the body which is not the seat of the disease. He advised soothing or stimulating applications to protect the part, and to a wet eczema he thinks a lotion is better able to come into close contact with the living tissues. He believes internal treatment is also necessary, and mentions the change of opinion which has come over the medical in regard to the relative importance of attention to the microbe in tuberculous, as compared with the more important elements of the nutrition and hygienic condition of the patient.

If auto-intoxication is suspected he knows of no better intestinal antiseptic than *benzo-naphthol*, which is odorless and tasteless. He thinks all alcohols increase the itching and should be as a rule avoided. If a microbicide is needed, *salicin* is recommended. Unless diabetes is present he does not believe in restricting the diet.—*The Post-Graduate*, November, 1901.

TREATMENT OF RINGWORM OF THE SCALP.

Dr. Lusk, *Post-Graduate*, November, 1901, recommends the following: Patches should be epilated or shaved

and the rest of the scalp shampooed and antiseptic washes applied to prevent further spreading. Apply night and morning to patches:—

R. Chrysarobin.....	gr. xxv.
Ichthyl.....	m. xv.
Acid Salicylic.....	gr. x.
Petrolatum.....	oz. i.

An oiled silk cap must be worn, so that the chrysarobin will not be carried to the face and cause dermatitis or conjunctivitis. In a few days there will be a violent reaction. Then a soothing ointment as boric acid may be applied. *Sulphate of copper*, ten to twenty-five grains to the ounce of lard or petrolatum, *oleate of copper* or *mercury*, *bichloride of mercury*, five to ten grains to an ounce of compound tincture of benzoin, *sulphur ointment*, *salicylic* ointment, may be used.

LUPUS.

In the *British Medical Journal*, September 28th, 1901, Snow gives the following treatment for lupus: Scrape away as thoroughly as possible the soft cell growth, and then, as soon as bleeding has ceased, apply lint soaked in *iodine* liniment to the raw surfaces. The lint is removed on the following morning to prevent vesication. Then an emollient dressing is substituted. Notes of ten cases are given."

ULCERS OF THE LEG.

Dr. O. Schulze (*Münch Med. Woch.*, March 19th, 1901), as reprinted in the *Post-Graduate*, says that of all remedies, new and old, camphor gives the best results in ulcers of the leg. He prescribes:—

R. Camphor Trit.....	dr. ss.
Zinc Oxid.....	, viiss.
Adeps ad.....	oz. vi.
or, Camphor Trit.....	oz. ss.
Zinc Oxid.....	, iii.
Olei Olivæ.....	, iii.

CUTANEOUS CANCER.

M. L. Heidingsfeld in the *Journal of the American Medical Association*,

July 13th, 1901, discusses the treatment of cutaneous cancer, showing that because of the indifference of many medical men to this condition, and because of fear of the knife, patients suffering from skin cancer find themselves in the hands of the cancer quack. The methods of these quacks and illustrations showing the results of their treatment are given. The author has used with great satisfaction an arsenic paste composed of five parts each of arsenous acid and pulverized gum arabic, and parts each of cocaine, and glycerine, with sufficient water to make a paste. The cases in which he has employed this method have not yet stood the test of time, but the immediate results have proved very pleasing. The paste is applied upon cloth and allowed to remain from twelve to thirty-six hours, according to the amount of inflammation it produces.—*Philadelphia Medical Journal*, July 30th, 1901.

DERMATITIS HERPETIFORMIS.

Dermatitis herpetiformis is much more common in childhood than is generally supposed. Gottheil, *Archives of Pediatrics*, June, 1901, reports the case of a girl aged nine years, who had suffered from the disease five years. When the eruption first appeared it was spread over the whole body, looked like measles, and was called contagious. The face, hands, and legs were the regions chiefly involved, but occasional patches have appeared on the body. All the attacks commenced with severe itching of the parts about to be affected. This symptom lasted several days before the first sign of dermatitis appeared. Then there was a sudden eruption of grouped vesicles, which were surrounded by a very small amount of inflammation. The vesicles finally ruptured and their secretion dried up into dirty scabs which left a reddened and perhaps slightly excoriated surface behind them when they fell off. The pruritis diminished and disappeared as the

period of quiescence set in. A second case occurred in a boy, twelve years old. The attacks came on at very frequent intervals, sometimes only a few days apart, and were distinctly bulbous in type. They always began on or around the genitals and thence extended to the abdomen and limbs. Treatment is very unsatisfactory. General tonic and hygienic measures, and when possible change of air and scene, are more efficacious than drugs in postponing and preventing relapses. Locally, any of the bland or cooling salves, or ichthylol in solution or ointment may be employed.

ERYthroderma squamosum.

Ravogli in the *Journal of the American Medical Association* reports a case of erythroderma squamosum occurring in a boy three years old. This patient had three attacks of this skin disease. The last attack

occurred on March 5th, 1901, when the skin of the whole body, excepting the palms of the hands and the soles of the feet, was red and covered with scales, that varied in size and appearance in different anatomical regions. The blood examination revealed 5,400,000 erythrocytes per cubic millimeter and 8,400 leukocytes per cubic millimeter. The differential count was made with the following result: small lymphocytes, twenty-three per cent.; large lymphocytes, one-two per cent.; polynuclear leukocytes, seventy-three per cent.; eosinophiles, one-four per cent. The patient did not complain of itching of the skin, or of stomach or bowel disturbances, and during the whole course of the disease there was no fever. The urine was apparently normal. The condition yielded readily to treatment, consisting of anointing the body with cod liver oil — *Philadelphia Medical Journal*.

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Editorial.

All communications concerning the Editorial Department of the *China Medical Missionary Journal*, should be addressed to Dr. JAMES BOYD NEAL, Chinanfu, Chefoo. All business communications and subscriptions should be sent to Presbyterian Mission Press, 18 Peking Road, Shanghai.

THE SETTLEMENT IN SHANSI.

One cannot but be saddened by the account which Dr. Edwards gives in another column of the present state of affairs in Shansi and of the settlement which was arrived at before he left Tai-yuen. After having most generously relinquished all claims for indemnity for the property destroyed, which must have amounted to many thousand taels, and after being urged to accept some token of the appreciation of the people, to be offered only Taels 2,000 by the officials for the building of his hospital, supplemented by Taels 350 from the merchant guilds, seems simply paltry. It makes one wonder whether the relinquishment of all claims for indemnity—a proceeding which has appealed to many in China as the right and proper thing for us missionaries to do—really pays. Certainly the officials like it, for it relieves them of a great deal of trouble, but do they really appreciate our motives in such unselfish acts, and are the people favorably inclined toward the religion which we preach by our so doing?

Personally the writer cannot but believe that the people must be more or less influenced toward a more kindly feeling for us by such acts of Dr. Edwards', but there is grave reason to fear the officials do not at all appreciate the noble motives actuating those who relinquish their claims. We might as well, however, make up our minds that it is hopeless to expect the official class in China, in their present moral state, to understand altruistic motives in others. Nevertheless it is most saddening to see how years of medical work—the kind of missionary work the Chinese appreciate, if they appreciate any—seem to have gone for naught in cities like Tai-yuen, Pao-ting, Moukden, and Peking. It will take years of labor to undo the mischief which a few hours of mob

violence accomplished in these places, and to get back to the point reached in medical work, and in the apparent favor of the people, before the outbreak of 1900. Even in places where no violence was perpetrated, the confidence of the people has been shaken, and it will be some time before they feel as free to come about us as they formerly did. The members of the association who are located in North China, most of whom have had their work ruthlessly destroyed, deserve the sympathy and prayers of all of us, that they have courage for the long building up of the future, and that they may be guided aright in all their plans. Might it not be well for us to particularly remember in our prayers Dr. Edwards in his Tai-yuen work and Dr. Christie in his work in Moukden, both of them fields of peculiar difficulty? Let us hope and pray that it may not be very long before both these noble workers will again be fully re-established in their old locations.

THE EDITORSHIP OF THE JOURNAL.

With this number of the JOURNAL voting papers are issued for the biennial election of officers who are to assume office on January 1st, 1903. The papers are sent out thus early in order to allow those living in distant provinces to get their votes back to the Secretary, Dr. Stuart, Nanking, in time to announce the result in the October issue. The editor of the JOURNAL feels compelled to resign his office, to take effect with the October number. He does this with real regret, as he has enjoyed the care of the JOURNAL during the past two years and more, and would gladly continue to serve the Association were his lot cast in Shanghai or in any station within convenient reach of Shanghai. Since his return to Chinan, however, he has found it impossible to conduct the JOURNAL to his own satisfaction (not to speak of the satisfaction of the subscribers) so far from the Press where the JOURNAL is issued. The very fact of his living in an interior city, and of its being necessary for material to be in his hands so long before the date of publication, discourages contributors from sending in manuscripts. Then too it is practically impossible for him to know long enough in advance of any shortage of material for any given number, as he is frequently compelled to allow manuscripts to go direct to Shanghai without seeing them himself or knowing their length. Also, too, he is not infrequently disappointed that articles which he had counted upon being sent direct do not reach the publishers.

For these reasons—reasons connected simply with the distance from his station to Shanghai and the inconvenience arising therefrom—the present editor begs to be relieved of a burden which is fast becoming too heavy for his shoulders.

In anticipation of such a step Dr. Boone was written to some time since in regard to the possibility of Dr. Lincoln, of St. John's College, taking the post. In reply Dr. Boone writes: "Dr. Lincoln was assistant editor of a journal at home, and he is well qualified to be editor of the CHINA MEDICAL MISSIONARY JOURNAL. He says, however, that he would not care to undertake it alone. Dr. Jeffreys of our Mission, who has come to assist me, has also been assistant editor of a journal at home, and he is a good writer. It occurred to me to suggest to him and to Dr. Lincoln that they might undertake the editorship jointly. To this they consented. There would be some advantages in this, as if one were away, one would still be here, and they could thus work well together. I believe you cannot do better than to get Lincoln and Jeffreys to be editors."

Besides these two gentlemen, Dr. Booth of Hankow, has also been nominated. We are all familiar with Dr. Booth's excellent work in "Medical Progress," so there can be no doubt about his ability to fill the post most acceptably. The only element of doubt in the case would be the distance of Hankow from Shanghai, a doubt which Dr. Hodge might be able to dispel from his experience in formerly editing the JOURNAL from that city.

Dr. Beebe's name has also been mentioned in this connection, but in a letter recently received he declines to be a candidate for the position. The choice therefore would seem to lie between Drs. Lincoln and Jeffreys in Shanghai, and Dr. Booth in Hankow, unless other candidates are forthcoming, who would be willing to undertake the duties connected with the editorship.

THE OPENING OF HUNAN.

One of the most remarkable developments of recent years is the opening of Hunan to foreign enterprise and missionary activity. Formerly the most conservative province in China, and the most actively anti-foreign and anti-missionary, it is fast becoming one of the most progressive and enlightened. It is gratifying to find that medical missionaries, as well as others, are experiencing the benefits of this favorable attitude toward Western innovations. In the *North-China Daily*

News of January 6th, appears the following from Changsha, Honan, under date of November 30th, 1901:—

"Mission work is progressing finely in Chang-sha. Dr. Keller of the C. I. M., who came here in the early summer, is meeting with good success. His daily service for the Christians, enquirers, candidates for baptism, and his own household are spiritual meetings, and it is very encouraging to see the progress the new converts are making. The Sunday service is very well attended; his temporary chapel being far too small to accommodate all who wish to attend. On Saturday, 9th November, he baptized three men, two of whom are natives of Chang-sha, the first fruits of his labors here—one was a proud Confucius scholar, the other formerly a small military official. Both are men of evident ability. Dr. Keller enjoys the confidence of the officials to a marked degree; they frequently seek his advice because, as one of them recently said in my presence, 'we can trust Dr. Keller and his assistants.'"

Dr. Keller is to be congratulated on the grand opportunities he is enjoying of helping on the medical and evangelistic regeneration of that most important capital of a most interesting province.

* * * * *

The editor of *Medical Missions at Home and Abroad*, after commenting favorably on the agitation now going on for the establishment of a central medical school in China, says in the issue for December:—

"There is hardly any need to say that if such a thing could be, and if God would be pleased to clear the difficulties out of the way, it would be an enormous gain to China, and, let us add, to the mission cause in China. The initial difficulty is expense. We need some wealthy Christian man in Great Britain or in the United States to take the thing to his heart and be willing to lay out, say £10,000 in building and equipping the school, and who would guarantee, say, £300 a year for five years, till the institution was fairly floated. Is there no one ready to do this good thing for China?"

* * * * *

Dr. Johnson, of I-chow-fu, writes as follows of adopting a plan which has been worked for some time by Dr. Watson of Ching-chow-fu, namely establishing a sort of adjunct drug shop, to which most of his outpatients may be sent with prescriptions only; the consultations being entirely free as heretofore. It would seem an excellent plan for helping along medical self-support:—

"My helper, Mr. Wang, will open shop on his own responsibility next year after the Ching-chow-fu pattern, buy his medicines from the dispensary, settling accounts monthly, and I send certain classes of diseases to him with prescriptions only. They to pay him for their medicines. Ague, itch, worms, conjunctivitis, syphilis, would be some of the diseases I should send to him. He has been wanting to do this for several years and I am very glad to give him the chance."

The editor would most earnestly urge all members of the Association to promptly return their voting papers to the Secretary, Dr. Stuart, Nanking. Dr. Stuart complains of a woeful lack of interest in elections by the members, so much so that he was once compelled to accomplish the election of a certain officer by casting a solitary vote for him himself, and thus complete the list. Now, though we all have entire confidence in the ability of our Secretary to select an acceptable lot of officers for the coming two years, we ought not to put such a burden upon him, simply because we are too lazy or too indifferent to fill out and mail to him our voting papers.

* * * * *

The JOURNAL acknowledges the receipt of ten dollars from Drs. Guinness and King, of Chefoo, toward the Nomenclature Committee's fund. The money has been duly forwarded to the Treasurer of the Association.

RESOLUTIONS ON THE DEATH OF DR. KERR.

The following is an extract from the report of the Annual Meeting of the Canton Medical Missionary Society, held January 15th, 1902 :—

"In reference to the late J. G. Kerr, M.D., LL.D., who died on August 10th last, the following action was taken :—

1st. That the Medical Missionary Society record with sorrow the death of Dr. Kerr, deeply sympathizing with his bereaved relatives and many friends.

2nd. That the Society also record their admiration of the great work which Dr. Kerr accomplished during his forty-five years' connection with the Medical Missionary Society. Of the many things in Dr. Kerr's life-work which call for appreciative notice, mention may be made of his superintendence of the Society's dispensaries from 1855 to 1865, the erection of extensive premises for hospital work, begun in 1865; his diligent supervision in the translation of more than twenty medical books into the Chinese language; the training of one hundred and fifty natives as medical practitioners; the visitation of the crowded prisons in Canton to minister to the tortured and diseased; the skill displayed throughout his long career as hospital surgeon, and his self-sacrificing devotion to a toil so incessant and exacting as that of a medical missionary in China.

3rd. Finally that the Society gladly recognize the very widespread esteem and affection in which Dr. Kerr was held by the Chinese, and cordially testify to his high Christian character, his long and valuable services to the Medical Missionary Society, and to his untiring zeal in medical practice and in the education of the Chinese in Western medical science."

Hospital Report.

ANNUAL REPORT OF THE CANTON HOSPITAL.

The following extracts from Dr. Swan's report for 1901 will no doubt be welcomed by many readers of the JOURNAL:—

"Another year of uninterrupted and progressive work has been added to the long period during which the work of healing, teaching, and preaching has been carried on at the Hospital. The attendance, as well as the financial and moral support of the Chinese, indicate that the work of the Hospital is being more and more appreciated. During the past year an unusual number of visitors as well as patients from among the better classes have been to the Hospital, and in various ways have manifested a genuine interest in this work that is devoted to the welfare of suffering humanity."

"As we think of this great work devoted to the relief and welfare of the Chinese, it is fitting that we should remember how largely it has been developed and for many years carried on by Dr. John G. Kerr, pioneer of medical missions, a great and good man, who, on 10th August passed to his eternal reward. Eminent as a physician and surgeon, he added to his skill a kindness of heart and a love for the poor and friendless that stood out as characteristics of his noble self-sacrificing life. Well may we mourn the loss of one who has taken such a large and active part in the service of medical missions and who has done so much further to their growth and development.

"The demand for private wards has been greater than usual, and part of the time it has been necessary to keep a list of applicants in the office in order to supply those who were waiting for such accommodation. To help to meet this demand the erection of a substantial three-storey building, thirty-one feet square, on the new property purchased in 1900, was pushed forward and completed in August. For some time four rooms in this building were rented to patients. The entire building is now occupied by hospital assistants, and by their removal from the main hospital buildings, six rooms are added to the number of private wards for rent. The new property is now entirely improved, and contains all kitchens, servants' and assistants' quarters, and storerooms, leaving a block of four large buildings clear for the use of patients only.

"In addition to the building extension already mentioned, other improvements have been made. An electric light installation for twenty-seven lights has greatly added to the comfort and convenience of the patients as well as the safety of the premises. Four lights in four of the main wards containing sixty-four beds enables us to do away entirely with the use of kerosine oil in these wards, thus avoiding what has heretofore been one of the most objectionable sources of atmospheric contamination. Double the number of lights are needed as soon as they can be afforded.

"The large Static Machine and X-ray apparatus has, during the entire year, given the best of satisfaction and proved a valuable aid, especially in cases of gunshot and fracture. With care, the influence of heat and dampness is not a serious obstacle to the use of the static machine in this climate.

"The use of the Roentgen rays has been of great practical value. In at least four of the gun-shot cases treated, the missile would not have been located without the use of the rays. A somewhat exceptional case was that of a Mr. Leung, who was brought to the hospital suffering severely from the effects of a gunpowder explosion. While holding in his hands a glass vessel containing over a pound of gunpowder, a spark dropped from a lighted

cigarette he was smoking, causing the explosion which carried away his hand and wounded him severely in other places by the bits of glass, many of which were deeply imbedded in his body. After removing all that could be found, the rays revealed a sharp angular piece of glass nearly an inch in length lying close to and rather beneath the femoral artery. Failure to discover and remove this, considering the nature of the missile and its location, might have easily cost the man his life. The glass fragments, while not so clearly defined as lead, were quite discernable with the use of the rays.

"Two typical cases of lupus exulcerans were successfully treated with the Roentgen rays, the method being an eight or ten minute exposure every three or four days for a period of over eight weeks. There is at present under treatment a case of epithelioma of the scalp which is much improved during a three weeks' treatment by the rays. While probably no method of treating malignant growths will ever equal the free and early use of the scalpel, yet recent clinical experience is showing that in Roentgen rays and probably arc light, we have a valuable means of combating some of the hitherto incurable forms of skin disease and carcinoma."

Following are the principal operations performed during 1901:—

OPERATIONS ON MEN.

OPERATIONS ON WOMEN.

Operation for necrosed bone	...	...	...	...	...	11
" for large abscesses	...	...	...	...	...	37
Amputation of arm (at shoulder joint)	...	...	...	...	...	1
" of leg	...	...	...	...	...	1
" of fingers and toes	...	...	...	...	...	6

Operation for hemorrhoids	...	...	...	...	...	5
" for imperforate anus	...	...	...	...	...	3
" for harelip	...	...	...	...	...	11
" for Cataract	...	...	...	...	...	36
" for Entropium	...	...	...	...	...	56
" Ectropium	...	...	...	...	...	2
Iridectomy	...	...	...	...	...	9
Operation for Pterygium	...	...	...	...	...	8
Excision of tumors	...	...	...	...	...	26

It is most gratifying to note the large increase in operations for cataract in Canton, a field which heretofore has not been much developed

The following is a summary of the statistics of medical work :—

Out-patients.	In-patients.	Surgical operations.
Men ... 15,720	1,478	1,865
Women 4,957	437	482
Total ... 20,677	1,925	2,347

TREATMENT OF BURNS—Puncture blisters and drain fluid, which either will be rapidly absorbed with a febrile reaction, or, coagulating, awaits but the entrance of pus organisms to become a culture medium. Infection being ever present in the skin, by trimming away all detached fragments a source of danger is avoided. With care cut away as much of the burned subcutaneous tissues as possible; a curette may be necessary, and when gently used will cause but little pain. An anesthetic is advised by some surgeons to be used when large, deep burns are to be dressed, and if it does not increase shock it may be useful at times. All of the burned tissues will not be removed at one dressing; inflammation must assist in the removal. Disorganized, dead, burned tissues must be cast off from the living, but we now know that the aid of pyogenic organisms is not needed to further this process.

Having cleared up the wound, it is next to be thoroughly washed by syringing with a solution of *hydrogen dioxide*, one part to six of distilled water—the writer has many times used a full-strength solution without causing pain; but as a routine treatment the syringing had better be commenced with weaker solutions. Much dead tissue will be dislodged and washed away in addition to that removed with instruments. When foaming has practically ceased, commence the dressing of the wound by applying all over its surface, and well over the edges to sound skin, strips of rubber tissue in size about one-half to one-fourth of an inch wide by three or four inches long; each strip to overlap the previous one laid down by a small margin. Rubber tissue is now made membranous in quality, and it is this form which will lie best and cause least irritation.

A few layers of loose, sterile gauze are to be fluffed over the tissue, and the whole held in place with a gauze bandage or by means of two or three narrow adhesive strips.—*Medical News*, quoted in *Therapeutic Gazette*.

A JOURNEY IN SHANSI.

E. H. EDWARDS, M.D., in *Peking and Tientsin Times*.

Much interest was aroused in June last when it became known that a party of missionaries was going into Shansi, in response to an invitation from the Governor, Ts'en Chun-hsuen, sent in the first instance to Rev. Dr. Timothy Richard.

Accounts of the journey and reception have already been published, but it may be useful to briefly summarise what was accomplished by the visit.

In the first place, the particulars received last year of the massacre of one hundred and fifty-seven foreigners (including the wives and children of missionaries) have been confirmed in all the more important points. Invaluable letters and diaries written by the missionaries when face to face with death have been obtained from Hsin-chou, T'ai-ku-hsien and Fen-chou-fu. Unfortunately the bulk of those written at Tai-yuan-fu, and all those written at Shou-yang, fell into the hands of the officials and were destroyed, evidently because uneasy consciences feared they would contain incriminating evidence. For the martyred missionaries and their families memorial services have been held, as a rule, in the places where they were massacred; but in some instances the remains were removed to more convenient burial places. Wherever the interment took place these cemeteries have been laid out in a semi-foreign style at the expense of the government, and the local officials are responsible for their care and protection. Other permanent monuments have already been, or are to be, erected to the memory of those who fell.

The Chinese Christians who so nobly witnessed a "good confession" last year have not been forgotten, and memorial services have also been held for them.

While the dead have been commemorated, the living have not been forgotten, for the governor has granted Tls. 130,000 as indemnity to the surviving Protestant Christians.

Another result of the late visit is, that friendly relations have been established between the missionaries and not a few of the officials. The governor himself having set the example of receiving and calling upon the foreigners, others soon followed. Ts'en Chun-hsuen is well known as being a progressive official, and if he is not thwarted in his efforts by those above him, he will doubtless institute many reforms in Shansi. In his intercourse with the missionaries he has always been most affable, meeting them, when they have visited him, at the entrance to his inner courtyard, and ushering them with great ceremony into his guest-room, where host and guests sat somewhat informally round a table, spread in foreign fashion with tablecloth, napkins, etc., he himself helping the sweet-meats and cakes. In conversation he uses plain, every-day language, and not the stilted book phrases so much affected

by the younger officials. The present Fantai was last year Taotai in the south of the province in charge of the large salt works there, and was instrumental in saving the lives of no less than twenty-six Scandinavian missionaries in his district; he is as approachable as the governor—in fact quite fatherly, and wins the esteem (one might almost say, the affection) of most foreigners who see him. It is scarcely necessary to refer to Shen Tun-ho, the enlightened Taotai at the head of the Foreign Bureau in Shansi. But for him, things would not have run quite so smoothly in that province. The experience he is gaining is undoubtedly fitting him for some higher post, which all his friends hope he may obtain sooner or later. On the other hand, some of the officials (whose names shall not be mentioned) have not hesitated to tell Shen very plainly that they had no wish to cultivate the acquaintance of the foreigner. Among the officials in charge of various Hsiens some have shown themselves utterly unfit for their posts—their pride being commensurate with their ignorance. It was these ignoramuses who put all the blame of last year's trouble on the "yü-min" (愚民). Fortunately when they said this, it gave us an opportunity of ventilating our opinion on the relative merits of officials and people; and, before we had done, they were aware that foreigners knew on whose shoulders the blame really rested.

But whether fitted for their positions or not, one thing has been clearly shown, and that is *their absolute power over the people*, with little or no force to back them up. All orders issued by the local officials en route were instantly obeyed, and we at once surmounted difficulties where otherwise we might have been delayed hours, if not days. It need hardly be mentioned that the officials are greatly concerned as to the action of Russia in Manchuria; one in high position assured me that unless that Power vacated the Tung-san-seng, he feared there would be more trouble.

The late events in Shansi have taught both officials and people to distinguish more clearly between Roman Catholics and Protestants. It is not a pleasant subject for a Protestant missionary to touch upon, but it is of such vast importance to all interested in China in any way that it should not be passed over. If the real causes of last year's troubles are ever found out, it will probably be ascertained that the actions of the Romanists had more to do with it than anything else. When it came to the settlement of affairs in Shansi they made the following demands:—

1. That Tls. 10,000,000 be paid as indemnity.
2. That the Futaï's Yamén, or a large college called the Ling-teh-t'ang, should be given them in lieu of their cathedral which had been destroyed.
3. That two market towns which had been Boxer head-quarters should be handed over to their converts.

Negotiations soon came to a dead-lock, and Father Barnabas (the priest in charge) then sent word to the officials saying that on a certain day at four

o'clock he should go to take possession of the college, and if there were any trouble, the responsibility would rest upon the local authorities. At the time appointed he went, and finding the college had been vacated by order of the governor, he took up his quarters there. He further set a going the story that Tung Fu-hsiang and Prince Tuan were on the war-path and about to make a descent on S'ai-yüng-fu to annihilate the foreigners. He sent a letter to the German officer in charge of the post at the nearest pass appealing for help. Eventually the matter was referred to Peking, and Father Barnabas went to plead his own cause. The truth then came out, and as a result he was not allowed to return to Shansi. After several months of negotiations it was settled that the monetary indemnity should be only Tls 3,250,000, that the demand for the two market towns should be given up; and that two months after the signing of the agreement the college should be handed back to the Chinese authorities. The above is not merely "street talk;" but the facts are well known among the people, and the consequence is, to say the least, the Romanists have lost "face." The Protestants made no such great demands; in fact two of the societies represented asked for no compensation for mission property destroyed, and the Chinese are not slow to note the difference.

When Rev. Dr. Richard saw Li Hung-chang last summer, the Plenipotentiary asked him to send in any suggestions he might have to make for the settlement of affairs in Shansi. Dr. Richard did this, and one suggestion was, that the province should pay Tls. 50,000 annually for ten years to support a college for Western learning to be opened in T'ai-yüan-fu. When the scheme was laid before Li, he shook his head over that clause, saying he thought the province was too poor to pay the amount. However, the suggestions were sent on to Shansi, and the governor eventually deputed a wei-yüan to go to Shanghai to discuss the question with Dr. Richard. The result is that the governor has promised the amount asked for, and Dr. Richard is to have full control of the college for a period of ten years, after which it reverts to the Chinese.

To sum up, we may say that affairs in the province are assuming their normal aspect. In June last we found the main road through the Ku-kwan Pass almost deserted, with scarcely any traffic on it whatever. When we returned five months later we found that the iron and coal works at Ping-ting-chou were in full swing again, for the road between that place and Hwai-luh-hsien (the distributing base for Chihli) was simply thronged with mules and donkeys carrying iron-ware and coal eastward. Companies of six to a dozen men were constantly met on the road carrying in the same direction the peculiar hardware for which Ping-ting-chou is famous. Occasionally a few mules were met carrying cloth, American oil, and other commodities from the coast westwards; but very little as compared with what went inland by the same road before the trouble.

A further sign of returning peace is that thirteen missionaries are now settled in the province; three at T'ai-yuan-fu belonging to the English Baptist Mission; and, in the stations further south, ten connected with the China Inland Mission.

Such are some of the facts. Readers must draw their own conclusion. If the Chinese are bent upon reformation rather than mere reform, will it not be for the advantage of all—whether diplomat, merchant, teacher, or missionary—to allow bygones to be bygones, and each one in his own sphere use all his efforts for the true “Regeneration of China.”

A MEDICAL COLLEGE FOR SOUTH CHINA.

By J. M. SWAN, M.D.

Probably no portion of the Chinese empire is more eager and ready for the acceptance of Western medicine and surgery than is this province of Kwangtung which has as its center the metropolis of Canton. Year after year new features in connection with medical work have arisen, showing unmistakable signs of a desire to throw off the old and put on the new. On this whole subject of medical education we in South China have never really gotten out of the woods so to speak, that is, we have not settled clearly and definitely on a given course and then followed it up.

While greatly interested in the various proposals that have been made through the MEDICAL MISSIONARY JOURNAL for the more thorough establishment of medical schools in China, none have seemed to fit the situation here in Canton. Social customs, personal characteristics, and particularly dialect have served to set us apart to some extent, and the idea of a central medical school for all China does not seem practical to many of us.

The real awakening of the Cantonese to the importance of Western methods of education, of hygiene, medicine, etc., is shown by numerous inquiries by them as to where and how they can be taught. The urgent inquiries as to the facilities for studying medicine, the absence of thoroughly organized systematic effort in this line of work, and the assurance that financial aid will readily be given toward establishing such work, has led the Medical Missionary Society in China, at its recent annual meeting, to take up this question in earnest. After full discussion the Society approved and adopted the following proposals:—

1st. “That a college of medicine for men be established in connection with the Society's hospital in Canton.

2nd. That a special committee on organization and equipment be formed with Hon. Robert M. McWade, Esq., United States Consul, as chairman.

3rd. That all members of the Medical Missionary Society and those interested in the great and good work which has been conducted by this

Society for the past sixty-three years, be requested to give all possible aid in the collection of funds and establishment of the college.

4th. That a general appeal be issued for subscriptions to the extent of fifty thousand dollars (\$50,000) to meet the expense of building, equipment, etc., the same to be owned and controlled by the Medical Missionary Society.

5th. That in connection with the regular college work, due provision be made for the thorough teaching of sanitation, hygiene, and the nursing and care of the sick.

6th. That steps be taken at once toward providing professors and teachers for carrying on this work; the Chinese language being used as the medium of instruction.

7th. That the special committee on organization and equipment associated with the Society's managing committee, be authorized to arrange for entrance examinations, lecture courses, tuition fees, and such rules and regulations as are necessary for the conduct of the work of the college."

Following this action of the Society, a committee of nine, including four of the most influential and wealthy Chinese residents of Canton, was appointed to take up this work.

Efficiency might perhaps be given as the watchword of those who have undertaken the establishment of the college. One of the most essential factors in the thorough education of medical students is an abundance of clinical material. In the Medical Missionary Society's hospital, clinical facilities are furnished which can be excelled in few other places. Over two thousand surgical operations are performed annually; nearly two thousand regularly registered in-patients were present during the year 1901, and over twenty thousand visits were made by patients to the out-patient clinics. In both the men's and women's departments the tendency of the work is to increase. The necessary clinical material is therefore assured, and with proper equipment and good teachers successful work should be accomplished.

A noticeable feature in the hospital work is the readiness with which the Chinese have rendered financial aid. The receipts along ordinary lines have about doubled in amount during the past few years. Substantial assurance has been given that this scheme for the establishment of a medical college will receive ready support. We therefore have good reason to believe that the near future will see this work on a good footing. As in all other work conducted by the Medical Missionary Society, so in this, Christianity and the true missionary spirit which includes a love for the welfare of men's souls as well as their bodies, will characterize all that is done.

Thankful for what has already been accomplished, let us urge on the great work of giving to the Chinese a thorough knowledge of Western medicine and its allied branches and so replace their ignorance of the laws of health, their barbarous methods of treatment, with a true knowledge of what will bring life, health and happiness to thousands who have never before known the blessings to be derived from cleanliness, God-given sunlight, and fresh air.—*American Presbyterian Mission, Canton.*

Evangelistic.

THE OUTBREAK IN SHANSI IN 1900.

[The JOURNAL has been fortunate in securing from Dr. Edwards, who has just returned from Tai-yüan-fu, the following authoritative account of occurrences in that city in 1900 and of the present condition of affairs.—Editor.]

So much has already been written concerning the outbreak in Shansi in 1900 that anything further must to a great extent be but a recapitulation; and it is only in response to the request of the editor that I venture to bring the subject again before the readers of the JOURNAL. To all interested in medical missions, Tai-yüan-fu will ever be memorable as the place where the gifted and saintly Harold Schofield spent the two short years of his medical missionary life; but to all the church it will now surely become a sacred place, consecrated as it has been by the death of so many "witnesses for Jesus."

Medical mission work was begun in Tai-yüan-fu in 1880, and during the twenty years in which it was carried on, never once was there any indication of ill feeling towards the hospital on the part of the people. Year by year its popularity increased until in 1898 the attendance of out-patients was something like 10,000. Dr. Arnold Lovitt took over the work in 1899 when he had only been in the country some eighteen months, and had to adopt means to circumscribe the work, so as to give him time for further study. He continued his clinics right up to June 27th, 1900, the very day of the outbreak. That being the first day of the sixth moon, the girls' school, which was in one corner of the mission compound and in charge of Miss Edith Coombs, had fortunately been broken up that very day for the summer holidays, and all the girls, except eleven, been sent away to their homes. The same day an anti-foreign decree had been received by the then governor—the notorious and infamous Yü Hsien—which was immediately posted at the door of the telegraph office. Dr. Lovitt and his colleagues hearing of this went themselves to inspect it; but finding it was without an official seal determined to take no notice of it.

At that time, Dr. and Mrs. William Millar Wilson of Ping-yang-fu were staying on the hospital compound as the guests of Mr. and Mrs. Simpson. They had originally intended to go home in the spring, but as distress threatened the southern part of the province, in consequence of continued drought, Dr. Wilson determined to postpone his departure until the autumn that he might be able to help the Christians tide over the trouble.

In consequence of the indisposition of his little child he had sent his wife up to Tai-yüan-fu some two months previously, but he himself only reached that city on June 26th. So confident were they all that no attack would be made upon them, that about five o'clock in the afternoon of the 27th, Mrs. Wilson and her little son went to the house of Mr. Farthing to spend the evening, while Dr. Wilson remained with Mr. and Mrs. Simpson, as he did not feel very well. The carter who took Mrs. Wilson had instructions to go to Mr. Beynon's house and bring Mrs. Beynon and her three children to the school on the hospital compound to be company for Miss Coombs who lived alone. Mrs. Wilson reached Mr. Farthing's house quite safely, and Mrs. Beynon was on her way to the school, but when she came within sight of the entrance to the hospital compound saw that a crowd had begun to gather, and wisely turned back and went home. It must have then been about six o'clock. Hearing that a riotous crowd had gathered at the gate, Mr. Simpson and others came out to expostulate with the people, but were met by a shower of brickbats. Seeing that things were assuming a serious aspect, they first sent a messenger with their cards to the officials, and then called all the foreigners on the compound, together with the eleven Chinese school girls and the one or two servants who determined to remain with them as long as possible, into Dr. Lovitt's courtyard. As the crowd at the gate increased in numbers, their courage rose, and beginning by burning the bookshop at the main entrance they gradually looted and destroyed every building on the compound, except one small kitchen courtyard, to which the besieged had retired. The buildings in this courtyard abutted on some neighbours' property, and these people, fearing lest their own house would be destroyed, began to pull them down. The missionaries then had to decide whether to make an attempt to reach Mr. Farthing's house, or remain where they were and assuredly perish. They determined to make the attempt, but had great difficulty in leaving the compound, as a large fire had been lit just outside the main entrance to prevent their exit. Having as they supposed successfully passed that danger, they had literally to fight their way through the mob, but on reaching their destination found to their grief that Miss Coombs, eight of the school girls, and the Chinese pupil teacher were missing. Though it was then well past midnight messengers were at one despatched to search and make enquiries; but it was not till the next day that they ascertained that Miss Coombs had heroically turned back to assist some of her school girls, and in so doing had lost her own life as already fully described. (See *Woman's Work* for November, 1901.) The next day (June 28th) Dr. Lovitt wrote the following letter, which reached me about a year later (June 6th, 1901). The emotion with which I opened that letter of my former colleague and read the first sentence, "Dear Friend,—We don't know whom you may be, etc.," can be better imagined than described.

BAPTIST MISSION PREMISES, Mr. Farthing's house, }
 TAI-YUAN-FU, 28th June, 1900. }
Thursday Morning.

DEAR FRIEND,—We don't know whom you may be, but we have thought it well to leave this letter in the hands of a trusty native to give to the first foreigner who might come along.

Last night the mission premises belonging to the Shou-yang Mission (until recently so called), but the property of Dr. Edwards, were completely burnt down by a lawless rabble, armed only with sticks and stones. They commenced their work about 7 o'clock, and we held our ground in one of the courts until eleven o'clock, when we found it necessary to escape. We did so by rushing through the crowd and burning débris, defended by three revolvers and one rifle.

The following were on the fired premises:—

Dr. Wilson, C. I. M.

Mr. and Mrs. Stokes,

Mr. and Mrs. Simpson.

Miss Coombs.

Dr. and Mrs. Lovitt and child.

We grieve to say Miss Coombs met with her death during the flight, being, as we afterwards heard, beaten down into the burning fragments when trying to rise up, after having stumbled first. She is now at rest.

We, the following:—B M.S., Mr. and Mrs. Whitehouse, newly arrived; Rev. G. B. and Mrs. Farthing and three children; Miss Stewart, governess to the Farthing children; Mrs. Wilson and child, C. I. M.; Misses Stevens and Clarke, C. I. M., together with the above mentioned who escaped last night, are now here.

Notifications were sent to the officials (it is impossible to accurately state to whom, as we have missed the messengers).

It is reported that the Chi-fu (?) was not far off in his chair, and a few soldiers who did nothing, except possibly to throw a few bricks at one and another in the mob. There was no real attempt at our protection.

This morning we are all safe and well; friendly natives followed us along the main street last evening, but as we turned the corner from the main street to reach the back door of Mr. Farthing's premises, we requested that they should not follow us, and they stayed, leaving us alone. The mob did neither follow us, nor come on later, and we have been unmolested until now.

Mr. Farthing and Mr. Whitehouse left here about eight o'clock with a native helper (Mr. Lin) to attempt an interview with the officials. Meantime we are awaiting their return, and will wire the result later if there is an opportunity.

Mr. and Mrs. Beynon and three children (B. and F. B. Society) are at a house not far distant from this. Mr. Hoddle is with them. Mr. and Mrs. Underwood, B. M. S., are still at Hsin-cheo, and were proposing to return to this city this week, to arrive at their house on Saturday afternoon.

We would like our dear home ones to know we are being marvellously sustained by the Lord. He is precious to each one of us. The children seem to have no fear. We cannot but hope for deliverance (hope dies hard), and our God is well able to do all things, even to save us from the most impossible surroundings when hope is gone. Our trust is in Him entirely and alone. We at the same time are seeking to do all that is in our power to do, and asking guidance at every step.

Messrs. Farthing and Whitehouse have returned with good report of promises to protect. We fear it is not to be trusted.

There is not much time. We are ready.

ARNOLD E. LOVITT, M.R.C.S.

From some Chinese who escaped, we now know that a few days later the governor sent the missionaries word that if they wished further protection they must go to a house he had provided for them in another part of the city. They suspected mischief, but had no alternative, realising as they did that they were entirely in the hands of the officials. Friday, July 6th, was the day fixed for their removal, and an officer was appointed to escort them with soldiers from one house to another; but when the time arrived it rained so

heavily they obtained permission to wait till the next day. That day also it rained very heavily, and the officer in charge of the escort sent to the governor for instructions and received a reply, "If it rains knives they must go to-day." That was Saturday, July 7th. They waited till evening, hoping that the rain would abate; but it continued without intermission, and as the governor's order was urgent carts were procured, and they made the move about midnight—five Chinese bravely accompanying them. On arrival at the house they found that the Roman Catholics—two bishops, two priests, one lay brother and seven nuns—were already there. Sunday, the 8th, was spent as quietly as possible; and on Monday morning they began to clear up the courtyard and rooms in which they supposed they would have to remain a month or two at least. About noon, the Hsien magistrate arrived and took down the names of all in the house—both foreigners and Chinese—without giving any reason. The final scene occurred in the afternoon when Yü Hsien himself went to the house with soldiers; arrested all whom he found there and took them to his own yamén, where they were indiscriminately slaughtered before his own eyes.

"Therefore are they before the throne of God; and they serve Him day and night in His temple; and God shall wipe away every tear from their eyes."

As regards our journey to Shansi, reception at T'ai-yüan-fu, and the memorial services held for the martyrs, details have already been published and need not be repeated. This, too, is hardly the time to discuss the vexed question of indemnity, but it may be known to some that, as sole surviving member in China of the late Shou-yang Mission, I asked for no compensation for mission buildings or personal property in Shansi. After my visit to T'ai-yüan-fu, I am more than ever convinced that was the wisest course to pursue. If I remember rightly, one writer in the JOURNAL last year said he thought such action would be regarded by the Chinese as a sign of weakness. Such has not been the case in Shansi. There is no doubt that when we reached T'ai-yüan-fu there was a feeling of uneasiness both among officials and people as to what our demands might be; as not only had mission property been destroyed but one hundred and fifty-seven foreigners (mostly Protestants) had been killed in the province. When it became known how reasonable the demands of the Protestants were, specially as compared with those of the Romanists, there was a distinct feeling of relief (I cannot say gratitude) which found expression both on the part of officials and people in several ways.

As regards our own mission, a movement was set on foot by the gentry of the city to make some acknowledgment. I declined to accept anything personal, such as a "Wan-ming-san" (ten thousand-name umbrella), etc., but could not well reject the governor's offer to petition the emperor to give several of us who had assisted in the negotiations a red-button. To the gentry I

suggested that if they really wished to show their gratitude they should help rebuild the hospital. The scheme was taken up, but of course had first to be submitted for the approval of the governor, with the result that he and six other high officials contributed between them the sum of Tls. 2,000. Just before leaving T'ai-yüan-fu I was told that ten of the merchant guilds (the same which had erected the monument to Yü Hsien) had contributed the *munificent sum of Tls. 330!* If this is an indication of the value they place upon our work, we certainly cannot flatter ourselves. Perhaps, however, they were not at that time sure whether there would be another outbreak or not, and felt it would be a pity to spend too much money on what might before long be destroyed. At present, of course everything in the way of medical work there is in abeyance, except for an opium-refuge which some of my old assistants have opened on their own account. If permitted to re-open work in Tai-yüan-fu I shall certainly go more on the "pay" system than before, but must not enlarge on that subject now.

As to the future, I cannot see further ahead than the next step, and that is, to go home and as opportunity offers, seek to arouse interest in missions in China.

Wishing my fellow-labourers throughout this land every blessing upon their work, I would earnestly solicit an interest in their prayers, both on behalf of myself as to what my future shall be and for the province of Shansi, at present with only one medical missionary—Dr. Atwood of the American Board.

E. H. EDWARDS, M.B.

SHANGHAI, January, 1901.

WORK IN AND ABOUT SOOCHOW.

Dr. Cattell in her report of the Tooker Memorial Hospital, Soochow, says of their dispensary patients:—

"Some who came were half afraid to venture in, and did not dare to tell of their real disease at the first visit. Others came all too confidently expecting the foreign doctor to perform miracles in their behalf. The Bible women, and sometimes Miss Lattimore, talked with the women in the chapel before they came into the consulting room. Many heard the gospel, and we believe that some at least heard to the saving of their souls. One in whom we were special interested we always speak of as "the pretty auntie." She came, bringing her sister with her sick baby; the sister, a timid boat woman, afraid to come herself. The baby was soon well and the mother and aunt so pleased. Less than two weeks later the mother died suddenly. May we not hope that the message she had heard in her visits to the hospital had already taken root in her heart? The aunt continued to come and bring other

patients, no less than twenty in all, but best of all she herself was keenly interested in the doctrine, and came quite regularly to church, always bringing some one else with her. In the after-meeting for women, following our Sunday afternoon services, she was always very ready to pass on to others what she herself had already learned. Some weeks later, while at our Sunday afternoon service, she was very angrily summoned out by a messenger sent by her mother, and we have not seen her since. Our Bible woman went to her home, and found her away, but learned from the neighbors that her family opposed her coming. We feel encouraged to believe that the seed was beginning to take deep root in her heart, or she would not have met with such opposition from her family.

One of the saddest cases that came to the dispensary was a young girl from a tea house near us. A look at her face was enough to satisfy one that her life of shame was not led from choice. One day I had a chance to speak with her, away from the attendant who always brought her, and found that her father, an opium-smoker, had sold her two years before, and when asked for how long a period of time she had been sold, I shall not forget the hopeless expression of her face as she replied 'for life.' The physical relief which came to this girl, encouraged many more of the same class to come, and our hearts were made very sad as we came in contact with this dreadful evil. Later several of these girls were admitted as in-patients, and we find ourselves confronted with the problem of how to meet this developing phase of our work. From the fact that the other woman's hospital in Soochow does not admit such patients, and that our proximity to the Moh Lu, where such dens of iniquity abound, makes our hospital easy of access, it is probable that should we encourage this branch of our work, we will find our hands more than full with it, possibly to the detriment of our work among other classes of Chinese women. Many things make it undesirable to admit such patients to the general wards, but with our present accommodations no other plan seems possible. Yet the work is pressing upon our attention so closely that we cannot lightly put it aside. We are seeking very earnestly to know the Father's will as to entering this open door."

Dr. Cattell also gives the following interesting notes of two hospital patients :—

"Two patients in whom we have been greatly interested, are sisters, both widows, aged forty-seven and forty-nine. The younger sister, who came first, had learned of the hospital by seeing a neighbor pass her house carrying a bottle of medicine which she had just obtained at the hospital. Being told at her first visit that she would need to come into the hospital for an operation and remain a week she went away and earned the money to come, appearing a few days later with a week's board in hand. From the first she seemed deeply interested in the doctrine, which she had never heard before. A little later her older sister was admitted, and from the very first she seemed

ready to believe the gospel message, saying, 'This is what I have been waiting for.' Passing through our chapel one morning shortly after our prayer service was over, I found the older sister there alone on her knees. She arose as I entered, but kneeled down again with me, and we prayed together. Her heart was so full that it seemed as if she could not stop crying to the Lord for help. She prayed that she might understand this new truth that had come to her and for power to turn away from the old life to the new. Her heart was much burdened for her sister and her old mother, seventy-five years of age. We believe that both of these women are seeking to know the Lord and rejoice at the evident signs of belief in their hearts."



Correspondence.

THE HANKOW MEDICAL MISSIONARY ASSOCIATION REPORT FOR 1901.

The H. M. M. A. is to be congratulated on having in 1901 almost completely carried out the programme arranged at the beginning of the year. Of sixteen meetings planned, fifteen have been held. Four places—the Concession, Han-yang, Wu-sen-miao, and Wu-chang—have been visited by rotation. There are fifteen members in the Society, all medical missionaries, of whom one has been away on furlough and four others are at work in country places some distance from Hankow. The average attendance at the meeting has been 6.4. At the beginning of the year the Society devoted one meeting to drawing up a code of rules for the management of its internal affairs, but fortunately the red tape wherewith it bound itself has proved elastic! At the end of the year the last meeting was partly given to arranging a scale of fees, which it was hoped the men's hospitals of this centre would adopt. It was felt that uniformity in the various hospitals so near each other was most desirable, and the general principle was that while paupers are rightly treated free, all others who can pay, should do so. Among the chief items the following may be noticed:— Ordinary out-patients, first visit, forty cash; after visits, twenty cash; venereal cases, 200 cash for one week's treatment; visits to patients in their own homes, 3,000 cash and chair money; in-patients per day, 100 cash for board; venereal cases, 150 cash; those breaking off the opium habit, 150 cash, with a minimum of twenty days.

Of the other meetings one was a debate on out-patient work, one was

devoted to the discussion and drawing up of the examination scheme, five have been purely clinical, and at six papers have been read dealing with various aspects of the work. As a rule it was the practical subjects that evoked the greatest interest. Dr. Gough's paper on obstetrical work, which has already appeared in the JOURNAL, drew special attention to the extra difficulties arising from the way in which the Chinese delay often for days before seeking foreign help. Dr. Booth, dealing chiefly with deformities of the feet, gave us a rapid *résumé* of modern surgical methods for dealing therewith. The president, Dr. Hodge, gave his experiences of the two lamentably common complaints of "phthisis pulmonalis" and "hereditary syphilis" met with in this district, and in the case of the former the supreme importance of good air and a liberal diet was emphasized. Dr. Gillison dealt with rectal surgery, and also gave a paper on "The Spiritual Aspects of our Work." This last paper, dealing with what was realized to be of the greatest importance, brought up the various methods of evangelistic work for in-patients and out-patients and emphasized the need for the medical missionary taking the lead in this department also. The debate on out-patient work was one of the most successful of the meetings, opening up a subject on which it was easy for all to relate their experiences and exchange suggestions.

At the clinical meetings there have been a great many cases seen and discussed, chiefly surgical and ophthalmic, and much help has been given and received in the diagnosis and treatment of many conditions. Among the most interesting cases the following may be mentioned:—

Bilateral necrosis of lower jaw, with elongated cleft into floor of mouth.

Small gunshot wound of eyeball, with immediate destruction of sight and subsequent sympathetic ophthalmia.

Tumour below outer angle of orbit pushing eye forward, so that it looked across the bridge of the nose, and found on operation to be an encysted putty-like mass running back to the base of the orbit, and thought to be a dermoid of the dura mater.

Depressed compound fracture of skull opposite the right temple. The right eye blind, with concurring optic atrophy, innervation of right hand much impaired, vomiting on very slight causes, e.g., on standing up.

A case of Charcot's disease of right knee and left hip joints.

A case of polyuria in a tubercular patient, the urine being free from sugar.

A number of cases of injury to the elbow joint.

The prospects for the year 1902 look very bright. Two or three new hospitals will be in working order. Dr. Davenport has been elected president, and a varied programme sketched out. Among the subjects for papers we notice the following. "Nursing in Mission Hospital," "Chinese Food in relation to Diseases," "Diseases not seen in China." It is expected that the attendance at the meetings will go up and that the usefulness of the Association's united work be even more evident in the future than in the past.

P. L. MCALL,
Hon. Sec.

Impressions made by a Home Trip. Dr. Annie H. Patterson writes as follows from Su-chien, under date of January 10th. Dr. Patterson has only recently returned from a trip home to America.

"Yours asking for an article for the next issue of our MEDICAL MISSIONARY

JOURNAL received, and I am sorry I can respond so poorly. I can only give you one or two impressions from the home land.

After ten years of dispensary work in interior China, with reading of medical journals the only means of improvement professionally, a person rarely realizes how he has been going round and round in a circle, with no branching off, until he makes a visit to the home hospitals. One of the most striking features then, as we think of our own dispensary, is the care each patient receives.

Take the out-door department, not the hospital patients, for illustration.

Each class of disease has its own department, with a staff of several doctors and trained assistants.

Every lung and heart carefully examined, every nerve reaction well noted, everything possible to be made into a culture examined under the microscope, et cetera—not to mention post mortem investigations.

A China missionary doctor is forcibly reminded of a room full of patients, with all kinds of diseases, and is the only one to diagnose and prescribe, and when he compares results, he is satisfied that the Chinese are easily cured, or "rushing" methods are not so bad after all.

A diagnostic point as regards œsophageal strictures was new to me, and may be to some others. In this part of China we are very familiar with what the Chinese call the Kei-cheng 隔症. Some of these can swallow liquids, but no dry food; others apparently can swallow nothing. I wish someone who has made a careful study of these troubles, would write his opinion. It seems to be a chronic inflammation of œsophagus and stomach, with much secretion. I have heard the theory advanced that it is a result of drinking hot tea and eating such steaming liquid food as many of our natives do, or the highly seasoned food with pepper and other things.

A method to decide whether food swallowed is slow in reaching the stomach is as follows: place patient on his back, give him a monthful of tea; as he swallows, listen over the stomach with a stethoscope and count the number of seconds before you hear it enter the stomach. Seven seconds is allowed for it, but in my experience it does not take so long. This of course proves nothing except retardation, or occlusion of œsophagus.

An interesting case of deformity was brought to the clinic here recently—a child, eight years old, with a tumour attached to sacrum and left buttock, and hanging from the tumour a perfectly formed hand. This latter had only recently appeared, so the father said. The child was well developed."

Chen-tu, Szechuan. Dr. Ewan sends the following interesting notes of his journey back to Chen-tu, and of the condition of affairs he found on arrival. His letter is dated November 23rd, 1901:—

"Just a line to assure you that I have not forgotten my promise re paper for JOURNAL, but local reasons have led me to postpone it for a little. We left Shanghai March 19th and Ichang April 5th. Our trip through the gorges was not uneventful; on two occasions we had holes knocked in our boat, resulting in no small damage to our worldly possessions. We spent a very hot summer in Chungking, but my hopes for Mrs. Ewan's health were fully realized; she gained all the way up the river and has enjoyed excellent health since.

We left Chungking September 4th, but did not reach Chen-tu till October 25th. Just fifty days to travel about five hundred miles. I have been very busy since my return, trying to repair damage done by white ants; they had so riddled the main sleepers and posts of dispensary that I had to pull down all the internal plaster partitions, take up the floor and replace many of the main sleepers and supports, consequently have not opened hospital yet. The people seem kindly and well disposed, but it is difficult to keep a certain class from using our name for evil purposes. Should I have anything interesting will try and not forget the JOURNAL."

Shao-wu, Fukien. Dr. Bliss writes as follows from Shao-wu, Foochow, under date of November 21st, 1901:—

"Yours of October 18th asking me to send something for the JOURNAL has been received. I should be very glad to do so if I felt that I had anything worth sending.

The fact is that this year I have been at my post but three months, as we did not reach here until about the 1st of April and returned to Foochow the last of May, coming back in October. When we first arrived here we found houses, church, schools and hospital wrecked by the mob of last year. My principal business has been superintending the work of repair.

Those on the hospital are not yet completed, but the dispensary portion is so that dispensing could be begun there a week ago. No notices of the opening were sent out, but the people seem to have been waiting for us, as we have had all we could well attend to and most of the cases are such as ought to come to a dispensary, or hospital if it was ready for them.

Of course during these three months a good many patients have come to me, but such haphazard work is not worth telling about. I can think of nothing to write about, but the three cases of knee joint suppuration, of which I enclose an account."

MEDICAL STORES TO PAY DUTY.

To the Editor of

"THE MEDICAL MISSIONARY JOURNAL."

DEAR SIR: The following reply of Sir James Mackay, to an application of the Hankow branch of Association, endeavouring to obtain duty free entrance for all medical stores, may be of interest to the members of the M. M. A. C. If anyone of another nationality can be more successful we shall all be grateful.

Yours very sincerely,

SYDNEY R. HODGE,
President.

3A PEKING ROAD, SHANGHAI, }
January 21st, 1902. }

SIR: I am in receipt of your letter of the 18th instant, calling my attention to the duties imposed on hospital supplies imported into China by the Medical Missionary Association.

In reply I have to point out that these duties appear to be imposed legally under the terms of the Peace Protocol of the 7th September last, and I have to express my regret that I am unable to assist you in the matter.

I am, Sir,

Your obedient servant, }
JAS. L. MACKAY. }

THE PRESIDENT,

Medical Missionary Association of China,
Shanghai.

Dr. Faries, who has been appointed one of a committee of two to look after the rebuilding of his station at Wei-hsien, Shantung, writes as follows under date of February 4th. This is the doctor's response to a request for an article for the JOURNAL:—

"Ask me something in my line. I do not know anything about medicine now. Ask market quotations on building materials, or of fuel to burn brick or the like. Am glad I did not write on charging for medicines, for you got a better article than I could have written.

Had a malarial attack a few days ago. It came on gradually with aching in the loins, sweating and then a little chill. It took two ten-grain doses to please it. Have not had to take quinine since I was in Japan, I think, or before. The only cause I can think of is that I had four large pots of fresh earth brought in and planted them with plants from America. The earth smelt very strong. This was ten days or thereabouts before my symptoms began. No mosquitoes came out of the earth. Am having all done that I can to get ready to build, and need Haggai for encouragement."

Dr. Mary H. Fulton sends the following pleasant lines (February 4th) from Canton, where she is about opening a new hospital for women :—

"How I wish I had something to send you for the JOURNAL. I have intended to send you all I could as soon as the new hospital for women was opened. It is just being finished this week. It is the first woman's hospital (except the ward at Liuchow, Dr. Clement's) ever built in these two provinces.

I have also fifteen thousand dollars to begin the first building of the woman's medical college. We hope to begin as soon as China New Year is over.

From Dr. Kerr's medical college for men,

now in Dr. Chas. Selden's care, seven men were graduated last week.

I sent five dollars to the Nomenclature Committee, but have not received any receipt. I fear it must have been stolen en route."

Dr. Edwards, on the eve of his departure for England, writes from Shanghai, January 18th :—

"I hope to start for home by the German mail. Beyond that step I cannot see. I am willing to come back if the Lord has still work for me to do in China. What little we were enabled to do in the past seems to have been almost completely wiped out. I know I may count on your prayers for my wife (who is quite keen to get back to China) and self that we may receive divine guidance."

Reports from Dr. Porter, who is trying to regain his health at Asheville, North Carolina, are not encouraging, but as Rev. Dr. Smith writes: "We keep on hoping for the expected turn for the better."

Dr. Beebe, who was asked to express in the JOURNAL his views on the training of native preachers in medicine, writes :—

"I am decidedly opposed to preachers practising medicine, but I am afraid I will not be able to put my thoughts in shape for the space you so kindly offer me. It is a good subject for discussion."

ARRIVALS.

December 30th, at Hongkong, H. WITTENBERG, M.D., wife and child, Basel Mission, Ka-yin-tshu, Kwang-tung.

January 1st, Dr. J. MACWILLIE and Dr. WALTER CLARK, from U. S. A., for C. I. M.

January 3rd, Dr. WILLIAM WILSON, C. I. M.

January 30th, Dr. ROSE PALMBORG, S. D. B., Shanghai.

February 6th, W. SQUIBBS, M.D., C. M. S., Szechuen.

February 16th, P. C. LESLIE, M.D., and Miss J. L. Dow, M.D., C. P. M., Honan; MAUD KILLAM, M.D., M. E. M., Chen-tu.

February 22nd, C. J. DAVENPORT, M.D., L. M. S., Wuchang; T. KIRKWOOD, L. M. S., Chungking.

DEPARTURES.

January 22nd, Dr. E. H. EDWARDS, Tai-yuen-fu, for England.

January 31st, Dr. J. A. ANDERSON, Tai-chow, C. I. M., for U. S. A.

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Empress of India	... Comdr. O. P. MARSHALL, R.N.R.	"	26th "
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*Athenian, 3,882 Tons	... Capt. H. MOWATT.	"	24th "

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24.10

(SPECIMEN PAGE.)

JOB

JOB
Job's Eighth Speech. He yearns for Access to God. He protests his Integrity. God indifferent to Wickedness

¹ Heb. him that is lowly of _{ov.a.} And 'the ^a humble person he shall save.
 30 He shall deliver even him that is not innocent:
 Yea, he shall be ^b delivered through the cleanness of thy hands.

And what his soul desireth,
 even that he doeth.
 14 For he performeth that which is appointed for me:
 And many such things are with him.
 15 Therefore am I terrified at his presence;

When I consider, I am afraid of him;
 16 For God hath made my ^c heart faint,
 And the Almighty hath terrified me;
 17 ^d Because I ^e was not cut off before the darkness, ^f I am not dismayed; ^g because of the darkness, ^h not because

23 Then Job answered and said,
 2 Even to-day is my ^c complaint rebellious:
 My stroke is ^d heavier than my groaning.
 3 Oh that I knew where I might find him!
 That I might come even to his seat!

^a Or, bitter
^b accounted rebellion
^c ch. 6.10.
^d ch. 9.11.
^e ch. 7.18.
^f ch. 7.9.
^g ch. 6.10.
^h ch. 13.9.
ⁱ Pet. 1.7.
^j ch. 31.7.
^k Ps. 44.18.
^l m ch. 6.10.
^m ch. 22.22.
ⁿ as ov. a.

ch. 6.11;
 30 ch. 23.14;
 Jas. 4.8;
 1 Pet. 5.6;
 ch. 42.7, 8;
 Ps. 18.20;
 24. 3, 4
 ch. 7.11.
 ref. 6.2, 3;
 ch. 32.4;
 ch. 13.18
 ref. ch. 13.3
 A ver. 10. ch.
 13.16
 ch. 9.11;
 33.14
 Ps. 7.9.
 6.6.10;
 Zech. 13.9;
 1 Pet. 1.7
 ch. 31.7;
 Ps. 44.18.
 m ch. 6.10.
ⁿ as ov. a.

ch. 7.10;
 ch. 9.11.
 ch. 13.9;
 1 Pet. 1.7.
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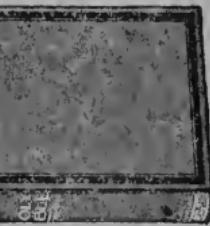
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